

THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY



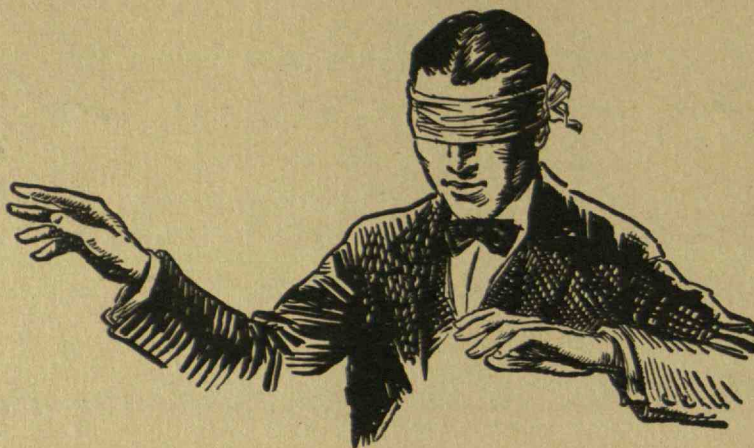
DECEMBER
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PUBLISHED BY THE ALUMNI ASSOCIATION

technology review

Published by MIT

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Most popular college sport

"As I look back on my college days," said the old grad, "it strikes me there were more men playing blind man's buff than all other games combined. I understand this is still the case.

"Get me straight. It was no child's play. What we were groping around for was pretty serious business—nothing less than a career.

"Too many men are in the dark as to what they will do after graduation. Either they neglect to specialize in anything, or hastily select a major which they afterwards regret.

"I know I would be considerably ahead in business if back at college I had sat down for a few hours' earnest thought to find out just what work I liked best—and then gone in for it heart and soul.

"Pick the thing that appeals to you, and don't let them tell you that particular line is overcrowded. Talk this over with graduates you know. Talk it over with your professors. Talk it over with the industrial representatives next Spring. Most of all, talk it over with yourself.

"The main thing is to get on the right track and to keep going. There's no fun in being 'It' in the game of life, with every change in fate ready to push you off an uncertain course."

*Published in
the interest of Elec-
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an Institution that will
be helped by what-
ever helps the
Industry.*

Western Electric Company

This advertisement is one of a series in student publications. It may remind alumni of their opportunity to help the undergraduate, by suggestion and advice, to get more out of his four years.



CLASS OF 1923's TRIBUTE TO THEIR ALMA MATER

THESE policies represent \$125,000 in endowment insurance payable to M. I. T. at the 25th Reunion of the Class of 1923. The members have insured as individuals and will pay their own premiums as a visible evidence of their loyalty to the Institute. This picture is reproduced in a Tech publication for several reasons:

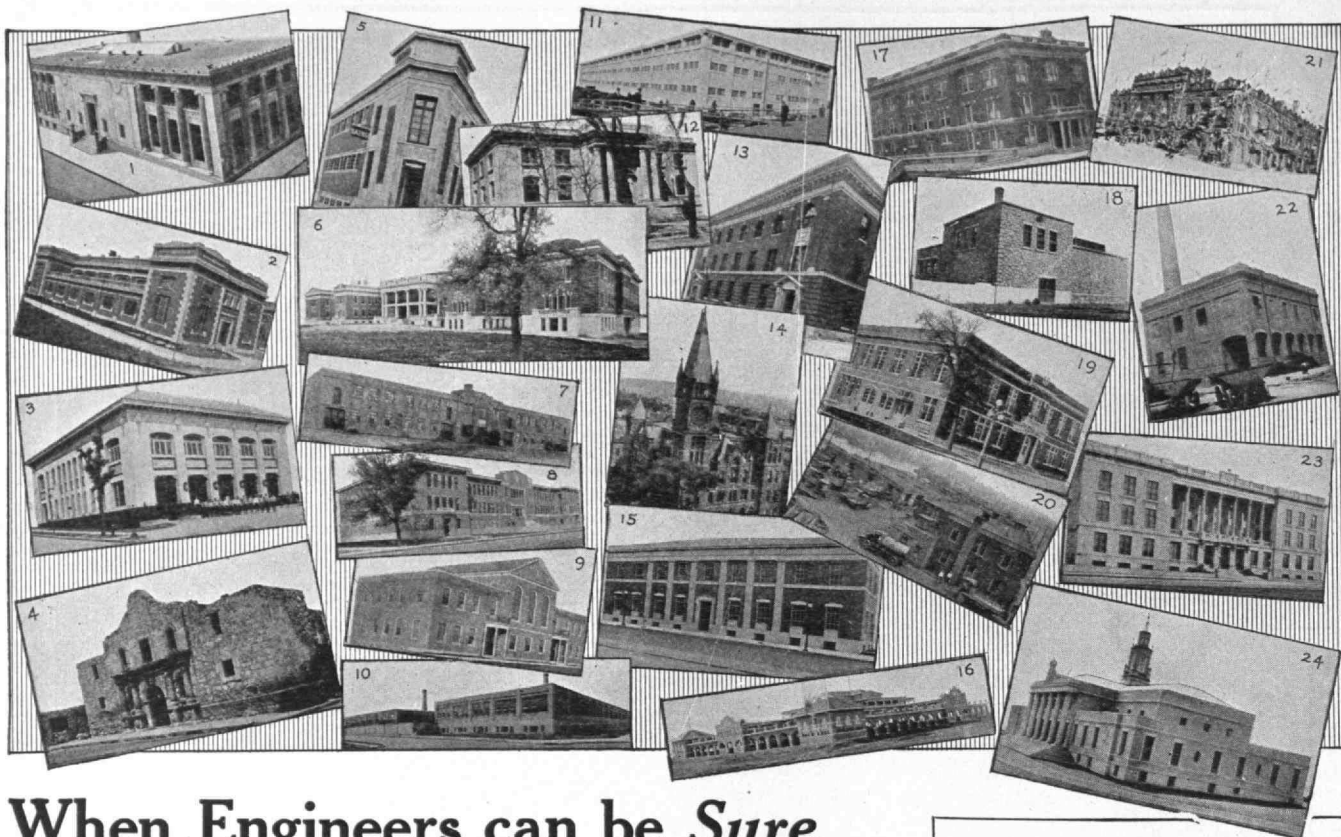
The M. I. T. Alumni Association naturally hopes that the 1923 example will be followed by subsequent graduating classes,—by individual undergraduates who are able and willing to do more individually—by graduates who may take simultaneous action individually or in groups, thus assisting in providing endowments for future needs in a large way—and by individual alumni who will make provision for general funds or for promotion of some special interest.

The Massachusetts Institute of Technology was founded in April, 1861, just a year before the John Hancock Mutual Life Insurance Company was chartered in the Commonwealth of Massachusetts. Both of these institutions have developed in Boston, side by side, and both have become leaders in their respective spheres.

The John Hancock Mutual Life Insurance Company desires to serve Technology to the best of its ability. Information in regard to Technology endowments can be secured from any agent of the John Hancock Mutual Life Insurance Company or by addressing the Home Office, 197 Clarendon Street, Boston, Massachusetts.

John Hancock
MUTUAL
LIFE INSURANCE COMPANY
OF BOSTON, MASSACHUSETTS

Sixty-one Years in Business — Now Insuring One Billion Seven
Hundred Million Dollars In Policies On 3,250,000 Lives.



When Engineers can be *Sure* that the Roof is Right

PICTURED above are a few of the hundreds of municipal buildings in the United States protected with Barrett Specification Roofs.

Today these roofs are recognized as the most permanent it is possible to build. They are bonded for twenty years against repair and maintenance expense. Many roofs of this type are in first class condition after forty or more years of service. Moreover, they take the base rate of fire insurance.

Here are the factors on which the leadership of Barrett Specification Roofs is founded. Each factor has a definite value to the engineer.

(1) The Barrett Specification (for flat or nearly flat roof construction) prescribes the

number of layers of Specification Felt, the amount of Specification Pitch, the top coat of pitch *poured* (not mopped) and finally the wearing surface of firmly embedded gravel or slag. *No supervision by the engineer is necessary to see that quantity and quality of materials are right.*

(2) The man who lays the roof must have a name for dependability. Only such men can obtain the Bond for the owner. *No supervision by the engineer is necessary to make sure that a dependable man is laying the roof.*

(3) Highly trained Barrett technical men are on the job to see that The Barrett Specification is followed in every detail. *No supervision by the engineer is necessary to be sure that his client gets a roof in which every detail of material and construction is exactly according to the specification.*

There are two types of Barrett Specification Roofs—Type "AA" bonded for 20 years, Type "A" for 10 years. Send for The Barrett Specification.

The *Barrett* Company 

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- 2 Calumet Sewage Pumping Station, Chicago, Ill.
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- 4 The Alamo, San Antonio, Texas.
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- 6 Parkland City Hospital, Dallas, Texas.
- 7 Park Board Warehouse, Minneapolis, Minn.
- 8 Public High School, Provo, Utah.
- 9 Recreation Building, South Manchester, Conn.
- 10 Bureau of Water, Philadelphia, Pa.
- 11 Municipal Bath House, Coney Island, Brooklyn, N. Y.
- 12 Public Library, Mason City, Iowa.
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- 14 City Hall, Scranton, Pa.
- 15 Park & Fire Departments Building, Baltimore, Md.
- 16 Fair Building, Fair Grounds, Sedalia, Mo.
- 17 Community Building, Johnsburg, Pa.
- 18 Water Works, Harrodsburg, Ky.
- 19 City Hall, Moorhead, Minn.
- 20 Department of Public Works, Philadelphia, Pa.
- 21 Corn Palace, Mitchell, S. D.
- 22 Incinerator Plant, New Orleans, La.
- 23 Memorial Hall, Topeka, Kan.
- 24 West Roxbury Court House, Boston, Mass.

Barrett Specification Roofs

*Bonded for
20 and 10
Years*

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INSTITUTE OF TECHNOLOGY

*Published monthly, from November
to May inclusive, and in July
at Cambridge, Mass.*

Vol. XXVI

No. 2

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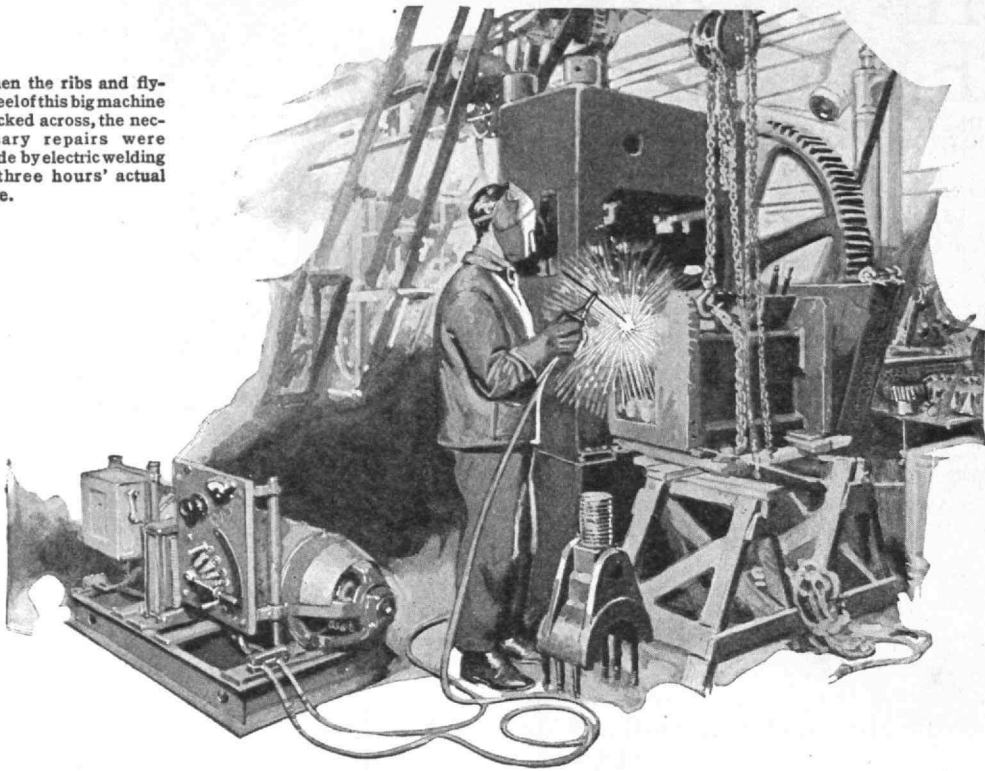
Tech men
realize
the importance
of expert advice
Our financial
experience covers
three-quarters
of a century

Established 1848

**Lee, Higginson
& Company**

New York Boston Chicago
Higginson & Co.
London

When the ribs and fly-wheel of this big machine cracked across, the necessary repairs were made by electric welding in three hours' actual time.



The needle that knits metal



One of the interesting departments of the General Electric Company's works at Schenectady is the School of Electric Welding, to which any manufacturer may send men for instruction.

There was a time when a broken frame or wheel of an important machine would tie up a big plant for days.

Now electric welding tools literally knit together the jagged edges of metals and insure uninterrupted production. That means steady wages, steady profits, and a lower price to the consumer.

GENERAL ELECTRIC

THE TECHNOLOGY REVIEW

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INSTITUTE OF TECHNOLOGY

Vol. XXVI

DECEMBER, 1923

No. 2

The Past Month

THE fall meeting of the Corporation was held this year on October 24. At this meeting three new life members of the Corporation were elected. They are Gerard Swope, '95, President of the General Electric Company, Arthur D. Little, '85, President of Arthur D. Little, Inc., and Franklin W. Hobbs, '89, President of the Arlington Mills. Several new appointments to the Corporation's Visiting Committee of the Department of Military Science and Tactics were made: Frank L. Locke, '86, W. Cameron Forbes, Henry A. Morss, '93, and Samuel M. Felton, '73. President Stratton, Edward J. Holmes, '93, and Desmond Fitzgerald were elected Trustees of the Museum of Fine Arts. Two changes in title, six promotions, and seven appointments of faculty grade were officially passed upon at this meeting. President Stratton and Everett Morss, '85, Treasurer of the Institute, both presented their reports.

GIFTS during the fiscal year of almost one and one-half million dollars, a slightly greater deficit than last year, increased income from investments but less from students and signs that the constantly rising cost of fuel seems to have come to an end, are outstanding items of interest gleaned from the Treasurer's Report submitted at the last meeting of the Corporation. The gifts include \$1,000,000 received from the estate

of Francis Appleton Foster and nearly \$300,000 of payments on account of the Educational Endowment Fund. These additions bring the capital account of that fund to about \$7,070,000.

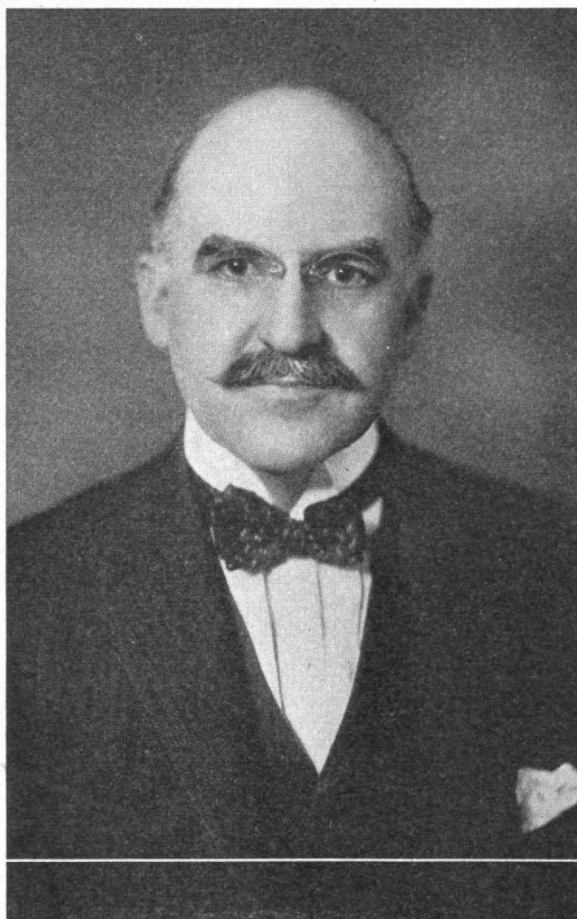


Photo by Pach

JOHN E. ALDRED

*Who on November 9 saw the successful establishment of his course of special lectures at the Institute.
See page 75*

The balance sheet for the year shows a deficit of \$18,600 as compared with the previous year's deficit of \$12,500. Actual operating expenses left a balance of income of \$13,000, but this was more than wiped out by charges to the profit and loss account. Losses in this account were incidental to the sale of many odd lots and low-return securities which had come to the Institute as gifts, and the investment of the proceeds in securities of better quality and, in many cases, of better yield. Income from investments increased \$138,000 over 1922, largely due to the increase in funds. Income from students fell off practically \$50,000 and with other adjustments the net operating income was \$60,000 more than in 1922. Expenses for teachers' salaries increased \$40,000 over 1922, but department expenses, general expenses and power-plant operation all decreased. New equipment (a compression laboratory and a new garage) caused a charge of \$36,000. As a result of all these items, the total

expenses increased \$37,000 over 1922.

As above stated, the cost of fuel seems now to be stabilized at a figure less than in 1922. In view of the favorable coal contracts recently made, next year's

report is expected to show a saving over 1923.

The dormitories show a better net income this year than ever before. Although part of this improvement is due to greater use of the dormitories during the summer, a considerable part of the difference is due to the small amount spent this year for repairs. The dining service has had another successful year due largely to the efforts of Mr. W. E. Smith of the Georgian Cafeterias.

The total of investment funds now exceeds \$17,000,000. With the exception of approximately \$500,000 these funds are completely restricted and can be used only for the specific purposes for which they were given. Financial authorities of the Institute mention, as one of the greatest present needs of the Institute, an increase in funds for unrestricted purposes.

DINNER time is approaching once again. On Saturday, January 5, 1924, in Walker Memorial, the annual Alumni Banquet will be held. At present it is impossible to announce speakers and other features of the banquet, but William R. Mattson, '13, has made informal announcements which indicate that the speakers' list will include the names of several prominent, interesting, national personages. The January issue of the Review, which will appear some two weeks before the Banquet, will contain an announcement of the program in detail.

ANNOUNCEMENT is made by the Society of Arts of the usual yearly series of four lectures on Science popularly presented for the year 1923-24.

On December 16, Professor Hervey W. Shimer will lecture on "The Age of the Earth as Revealed by Geology and Radio-Activity." The other lectures are "Fire and Fire Prevention" by Professor Gordon B. Wilkes, '11, on January 13; "Photography, and Some Recent Applications" by Professor Arthur C. Hardy

on February 10; and "Molecules, Atoms, and Electrons" by Professor James F. Norris on March 9.

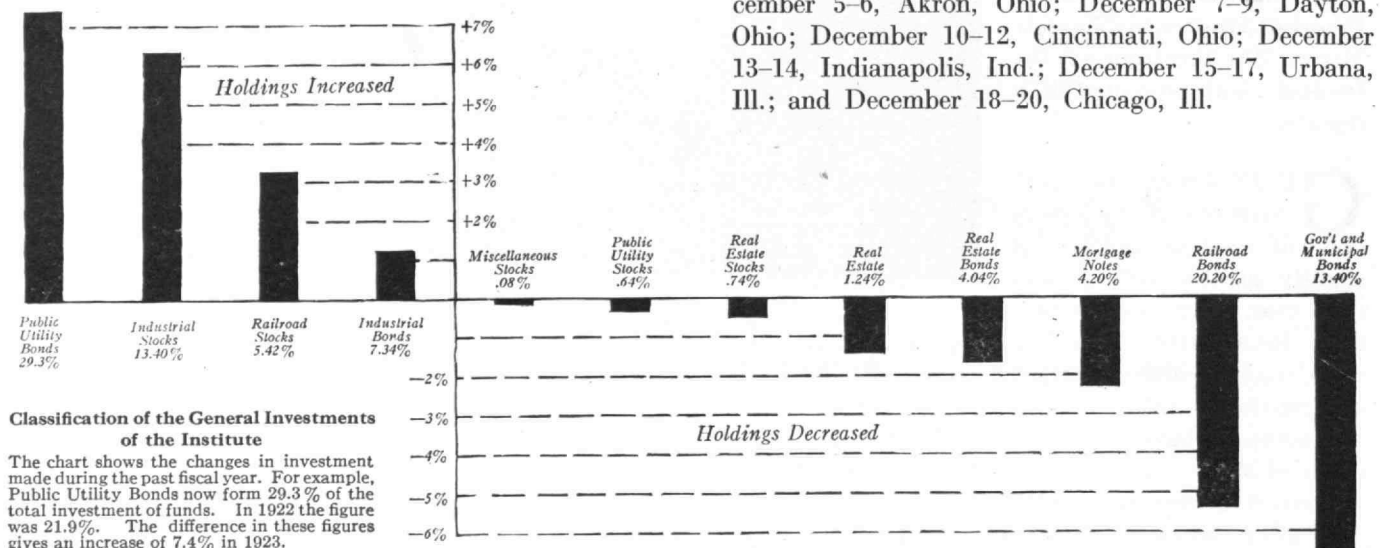
The lectures are scheduled for Fridays, Saturdays and Sundays at 4:00 p.m.

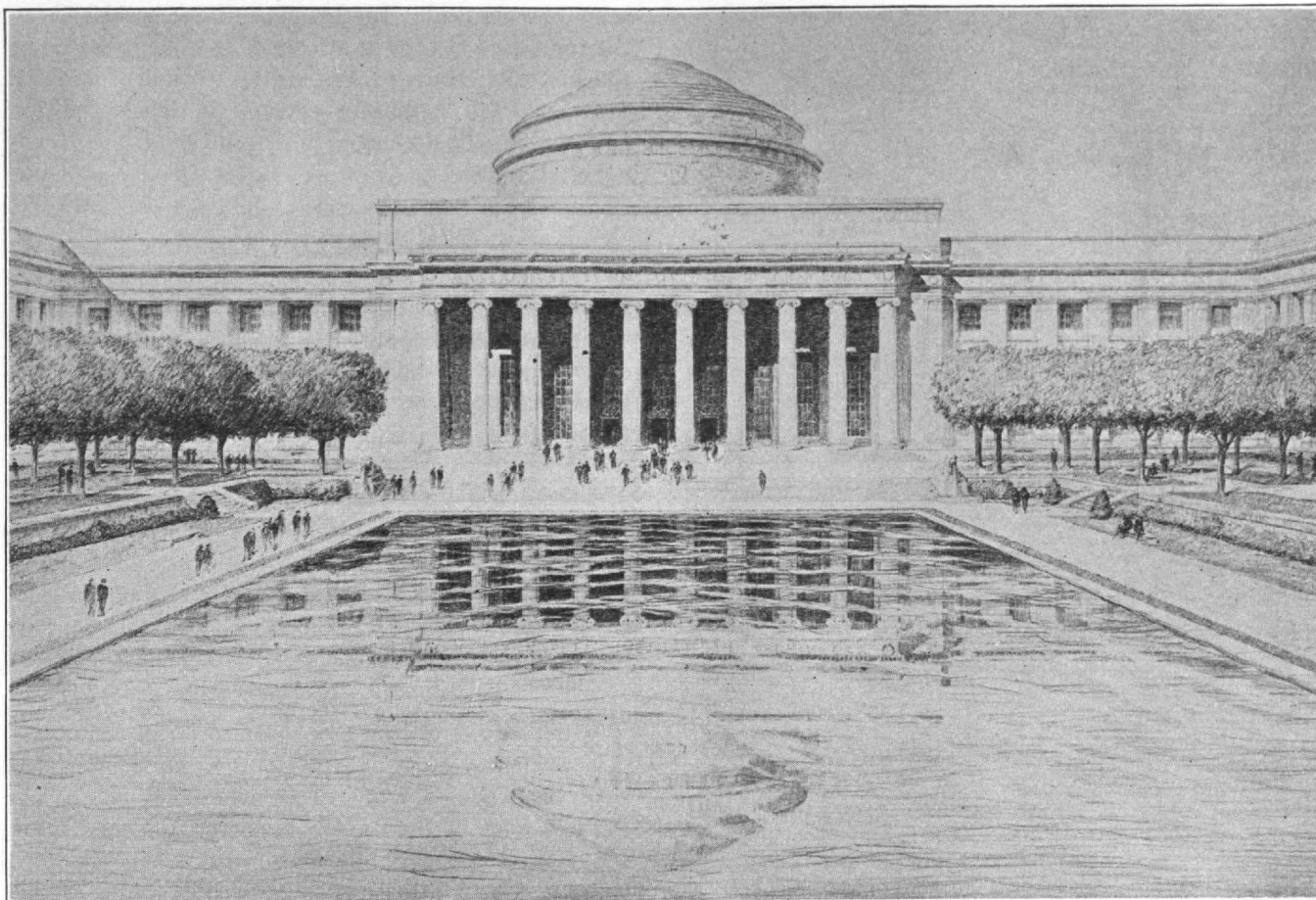
HENRY B. Phillips, Associate Professor of Mathematics at the Institute, began a series of lectures in radio reception and transmission on October 30 for the State Division of University Extension. The ten lectures of the course are to be given in the evenings at the Institute buildings and will include the problems of radio construction, installation and operation, both for transmission and reception.

Professor Phillips, says the *Boston Post*, "is regarded as one of the foremost authorities on radio in this country."

IN this section of the November Technology Review the statement was made that the Massachusetts Power Committee, of which Charles T. Main, '76, is Chairman and Professor Dugald C. Jackson, Head of the Department of Electrical Engineering is Vice Chairman, had completed a report upon the power situation in New England. The Review is now informed by Mr. Main that its information (which was based upon newspaper reports) is inaccurate and that the extensive report upon which the Committee is working is still far from complete. The Review regrets that this inaccuracy should have been spread further in its columns and is glad of the opportunity to correct its earlier information.

DURING the month of November, Orville B. Denison, '11, Executive Secretary of the Alumni Association, swung about his circuit to make eight visits to the Local Alumni Associations specified in the November Review. His tentative schedule for December is as follows: November 30-December 1, Detroit, Mich.; December 2-4, Cleveland, Ohio; December 5-6, Akron, Ohio; December 7-9, Dayton, Ohio; December 10-12, Cincinnati, Ohio; December 13-14, Indianapolis, Ind.; December 15-17, Urbana, Ill.; and December 18-20, Chicago, Ill.





THE MIRAGE

No sheet of water in a desert ever gratified the eye more than this sketch (from the office of Welles Bosworth, '89, Institute Architect), which shows a possible solution of the problem, ever before the Institute authorities, of beautifying the Great Court. The Review's cover this month emphasizes this particular idea.

ANNOUNCEMENT was made on November 13 of the appointment of Dr. Douglas W. Johnson as exchange engineering professor to France from the seven American educational institutions which first banded together a few years ago for the purpose of promoting scientific liaison with France. Dr. Johnson's connection with Technology as an Instructor in Geology from 1903 to 1905 and as an Assistant Professor of Geology from 1902 to 1907 makes his appointment of particular interest to Technology men.

In 1922 Professor Johnson received the Elisha Kent Kane gold medal of the Geographical Society of Philadelphia in recognition of his services to geographical education and to the science of Military Geography as exemplified in his volume, "The Battlefields of the World War."

The first exchange professor to go to France under this arrangement was Arthur E. Kennelly, Professor of Electrical Communication at the Institute, who went in 1921-22.

WITH great regret the Review records the death of General Edmund Hayes, '73, which occurred on October 18, after a short illness and at the age of seventy-four years.

One of General Hayes' most notable accomplishments was the design and erection of the cantilever bridge over the Niagara River in New York. Besides his work in America, he was considerably interested in civil engineering projects in other countries. He retired from active engineering practice a few years ago. General Hayes acquired his honorary military title while Chief of the Engineering Division of New York State. He was at one time a member of the Executive Staff of Former Governor Cornell, of New York.

He was one of the Institute's most prominent alumni and was a Life Member of the Corporation. At its recent meeting, the Corporation passed a resolution of regret at his death. General Hayes was married in 1878. His widow survives him.

NEXT MONTH: AN ANNIVERSARY

In the January, 1924 number, the Review will celebrate with considerable pride and enthusiasm its Twenty-fifth Anniversary. It was in January, 1899, that a small brown-covered quarterly magazine began its career with the hesitant hope that it was not adding too much to the bulk of the printed word. By fitting ceremonies the Review will hope next month to celebrate its Silver Jubilee.



ECLIPSES THEN AND NOW: NOW

Dr. James Worthington of Oxford University, and Former Dean Burton of the Institute, as members of a party which, at Lompoc, Cal., on Sept. 10, obtained remarkable photographs of the solar eclipse

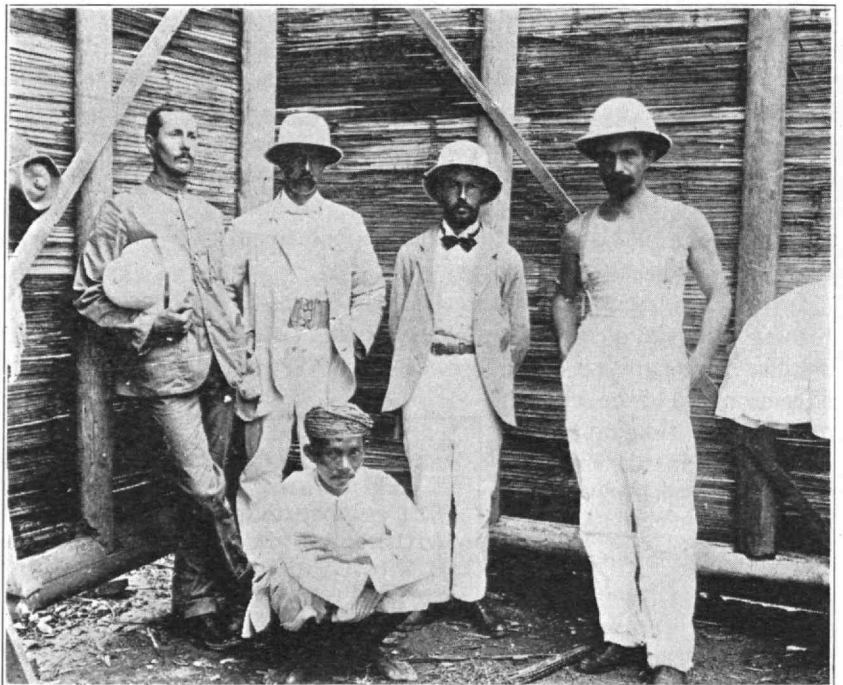
solar obscurement. In this expedition, besides Dean Burton, were George L. Hosmer, now a Professor at the Institute, Harrison W. Smith, '97, and Gerard H. Matthes, '95. A lengthy account of this expedition appeared in the January, 1902 number of *The Technology Review*.

EDWIN H. BLASHFIELD, '69, it was recently announced, has been chosen to paint a large mural to decorate the main hall of Walker Memorial. The mantel in the room has already been removed and on December 17 the hall will be closed to permit Mr. Blashfield's work on the mural and to allow workmen to set about the complete redecoration of the room. A Corporation Committee on the decoration of Walker Memorial has been considering for some time plans whereby the building could be made more truly a memorial to the man whose name it bears. The mural is but one of several changes that have already been decided upon. It is hoped that it will be completed for unveiling on January 5 at the Alumni Dinner.

PROGRESS on the new dormitories is startlingly evident. Nothing yet seems to have interfered with the well-laid plans of the constructors. When the last issue of the *Review* appeared, the excavation was complete and a pile driver was busily at work laying the foundation for the structure. Now, as this is written, the concrete beams and girders are complete to the level of the fourth floor.

FORMER Dean Burton of the Institute, who is now living at Carmel-by-the-Sea, in California, came suddenly into the scientific limelight on September 10 when, at Lompoc, California, he and Dr. James Worthington of Oxford University succeeded in obtaining almost the only satisfactory photographs in this country of the solar eclipse which occurred on that date. Mr. Worthington, who was in charge of the expedition, used nine different cameras especially designed for solar eclipse work, some of which he had already used in Portugal, Tasmania, the South Sea Islands and Brazil. In the newspaper accounts which toured the country, *Technology's* former Dean found himself transfigured first of all into Professor Emeritus of Astronomy and later to cap the climax, of Astrology. Besides Dean Burton, *Technology* had another representative in Russell H. White, '16.

Dean Burton's part in this expedition calls to mind his organization of an expedition which in 1901 left the Institute for Sumatra, there to photograph another



ECLIPSES THEN AND NOW: THEN

Here is the party, organized by Dean Burton, which, in Sumatra, observed the eclipse of May 18, 1901. The standing figures are from left to right, Gerard H. Matthes, '95, Dean Burton, George L. Hosmer, and Harrison W. Smith, '97

Editorial Comment

Wanted From Alumni: Men, Not Money

Upon a corresponding page, one month ago (in the course of an argument that decreased enrollment was far from meaning a decreased education efficiency) the Review suggested that the Alumni of the Institute could admirably serve it by striving, to help it add not to its undergraduate numbers, but to its undergraduate brains. Having said that much, we said, mindful of the unities, no more.

It was a simple thought that was in our mind—simple, far from original with us, but so practicable, so truly helpful, and so amazingly unapplied to our affairs as to be of high interest to anyone concerned with our welfare. It is the idea of Local Alumni Scholarships.

Within the past few years iconoclasts have risen in the ranks of college graduates, teachers and administrators and asked, actually asked, aloud in public, "Of what use are collegiate alumni and of what significance in the gregarious tendency which huddles them together into their well-known Associations?" This question has always created a difficult situation, and its positors have usually been treated as the precocious child who blurts the terrible statement when the clergyman is being entertained at dinner. As for those impossible creatures who answer their own questions with (a) Nothing and (b) None, they are downright Bolsheviks and fit only for deportation. Leavenworth is too good for them.

Naturally enough, these questioners are of our own breed. No one who is not a member of the Alumni Association of some college can realize the utter futility of some aggregate existences. But for all that the quarrel is usually confined within family limits it is often bitter, loud, recriminatory. Occasionally a harassed teacher will speak of the alumni influence as a menace, to the complete bewilderment (and hence indignation) of a number of douce, respectable business men who have sent sustaining membership checks to their alumni secretaries for fifteen years, attended the Big Game every season and gone back to a reunion or two. Menace? Poor old Spelvin; the Trustees must have held up his promotion.

Yet there is apt to be truth in the charge. It is made, usually, by persons who deprecate the tendency which alumni show to minimize the importance of scholarship and to maximize the importance of athletic victories.

Within our own Alumni Association we may discuss this with a calm which few alumni mouthpieces have felt it proper to maintain. We may do this primarily because the inadequacy of four years for proper instruction in engineering (always great and ever growing) has placed all students who ever ran our course under a sense of scholastic pressure which they have

never forgotten, and which renders impossible to this day the maintenance of those two greatest of collegiate Frankensteins, Varsity baseball and football teams. Thus cribbed by circumstance, our own alumni find it genuinely difficult to fall into either error. We may still fall into the uncomplimentary categories of the blunt and courageous Helen Sard Hughes who said that all alumni were either "financially strong or weakly sentimental" (without adding, as she might have, "or both"), but here again circumstance protects us and renders small the likelihood of our menace.

But can we say no better for ourselves than this? Providence may withhold our disservices but can we not, and do we not, by the operation of our own wills, occasionally do a helpful deed for the institution of our mental births? What is our purpose, what is our function?

For answer to that, listen across the widening gap of months, to the words which C.-E. A. Winslow, '98, spoke for the Alumni at the inauguration of President Stratton:

Since Mr. Munroe asked me to speak this morning I have been thinking a little about the function of the alumni and their relation to the institution. Of course, in times of endowment drives, their function is obvious. But in the short intervals between those periods, the alumni consider that their function is to advise the faculty how to educate the student.

I am a teacher as well as an alumnus, so I do not agree to that supposition. I am inclined to think that the value of the alumni to their Alma Mater is not because they are alumni at all, not because they are old and wise at all, but because they *were* students. They come back to their institution because it makes them feel young. It takes them back to the days when they were undergraduates.

It seems to me that these alumni are of primary value because they bring this undergraduate point of view. The Faculty and the Corporation understand the daily difficulties that are to be overcome, but it is well that they should have by their side the spirit of ambition and pride and boundless hope. It is well that the alumni should hold up to every faculty and every corporation the institution of their dreams, — which is the institution that they thought the institution was when they were students.

But that, which is witty and is wise, can scarce be all. The dividends which an alumnus obtains from a payment of some \$1,200 in fees come back to him in a percentage which ranges in the hundreds of thousands. For these benefits there can be never compensation. There is a homelier debt than this; one we know but one of which we are not always mindful: upon the education of every student the Institute spends, roughly, three times more than it receives.

Technology is a prideful institution, and disinclined to mention that. It dislikes to dunn its former students for money, and its present financial situation, although susceptible of improvement, is sufficiently sound to deliver it from this necessity. The necessity which it will always face is not for money, but for students of

a character worthy the spending of the money it has. In this problem, the Alumni can aid as can no other group of men. Specifically, they can aid by a concerted action towards providing scholarships for youths in the High Schools of their localities, who show inclination and ability for engineering study. Already, Dr. Stratton has spoken of this; already, the officers of the Alumni Association are at work upon details; already, the Worcester County Alumni Association seems likely to initiate the plan.

Here is a simple culmination to our argument. It is equally simple as the partial solution of an Institute problem. Larger and weightier services the Alumni could find to do if they would. This one is not to be despised for its simplicity. A system of such local scholarships would give an aid to Technology and a hegemony to the Alumni Association the value of which would materially appreciate as time went by. Meantime, it might help over an embarrassing conversation pause occurring possibly, when some tactless person asked of an alumnus, why was he associated?



Glorifying the American Drink

"The time and place —" (we are copying a widely broadcast dispatch which quotes Professor Samuel C. Prescott, '94, speaking of his coffee researches at the Institute) — "do not permit a recital of the great masterpieces of literature, music and art which have been produced under its beneficent exhilaration."

This was said of the coffee bean, when infused. It is hard to imagine how Professor Prescott (or even Elbert Hubbard) could have said anything more for endorsement. Our regret is that Professor Prescott, having made the endorsement so full, should have not merely made the corroboration scant, but should have left it out entirely — should have ruled out the evidence in his own case on the plea that the time and the place were not fitting for the "recital."

Recital. Recital of the great masterpieces of literature, music and art. Professor Prescott might here escape criticism on a technicality. Certainly a recital of *Paradise Lost* (if Milton drank coffee) or of the *Fifth Symphony* (if Beethoven did) would not have fitted the time, which we judge to have been an evening's small fraction, nor, more certainly, the place — which was the theatre of the Convention of the National Coffee Roasters Association. As for a recital of *Whistler's Portrait of his Mother* we can imagine no time nor place whatever which would have permitted its accomplishment. We conceive, then, that we are safe in assuming Professor Prescott's recital to mean a recounting—a recounting of the great masterpieces

produced under the euphoric stimulation of the great American beverage.

Why, we ask, did the place lay any prohibition upon this recounting, and why did time do more than make advisable a compression of the catalog? One can enumerate many things by reading aloud for fifteen minutes. Surely the Coffee Roasters could have spared so many, and been well fortified of information for their pains. As for the world at large, which synchronously drinks its coffee and reads its news dispatches, surely it would have called upon its kitchens for a second, third or fourth cup on the morning it should have chanced upon so cogent a testimonial — thus working for the great delight of those who roast coffee that they may eat bread. Professor Prescott passed a great chance by.

We confess to an anxiety that, before much more coffee has flowed over the dam, Professor Prescott find the time he wishes, and the place. For ourselves, we admit a complete ignorance of his source books. No biography of literator, artist or musician has yielded to us the secret of the brand upon which he built his masterpieces. We know of Voltaire, of course (mentioned by Professor Prescott in a parenthesis) and his forty cups a day, and we know of Balzac and Rossini. But we know also of Tennyson, who smoked five pounds of tobacco in a week, of Poe and DeQuincy whose inputs of rum and opium, severally, were never scientifically measured, yet were historically noticeable, and Wilde, whose weakness lends itself less gracefully to print. The experience of pleasure, gained however, is artistically productive, yet no group of men had ever the foresight of our present Coffee Roasters in invoking science to save the arts lest, by legislation, they perish.

It is a brave plan to which science was able to lend concurrence yet (we cannot avert this criticism) in Professor Prescott's reassuring voice there seems the hint of a bravely restrained hysteria. Does he fear lest our coffee will go to join our cocktails should his endorsement be less nitid than it might?

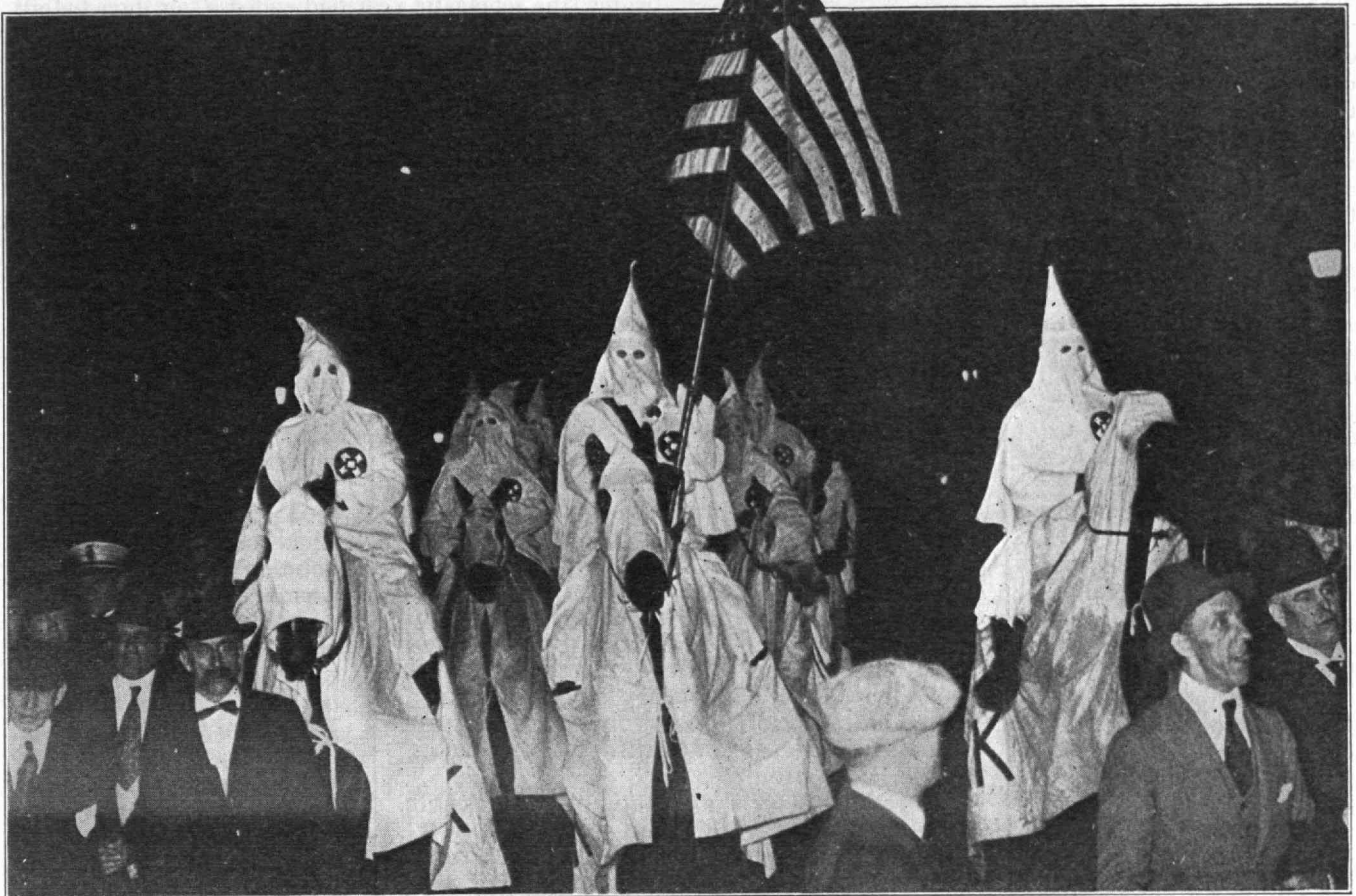
This is a grave question, perhaps improper to be voiced. Our own ignorance of corroborative names suggests that a mere difference in literary, musical and artistic standards may be the extent of our trouble. We plead, therefore, for a roster, a catalog, a list, any summary reassurance.

There are, says Professor Prescott, "just about 5,479,452 cups of coffee consumed every day in this country." If the recounting of works be good, all will be merry for the Coffee Roaster. If it be (to our way of thinking) not good — if it be small, or wanting in conviction — if upon there should occur the names of Mahler, Yeats, Rubens or, for the modern instance, Berlin, Wright or Epstein — then let the Coffee Roasters be warned that the number of cups drunk in one day is going to fluctuate suddenly, and with an unsuspected violence, to the new level of just about 5,479,451.

An Eye-Witness in Oklahoma

A Technology man finds himself in the

midst of the recent turmoil



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It was my fortune (good or bad, I scarcely know which) to be a resident of Oklahoma during the recent turmoil which focused so wide and so close an attention upon the State and its Governor. The political details of it are, I imagine, well known to the readers of this article. Not so well known, but, I think, equally interesting, is the manner in which the educational institutions of the State came into conflict with the political powers. It is this phase of the disturbance with which, in this article, I wish to deal.

The stage has been set for you by the newspapers. Let me start by introducing the principal actor, John Calloway Walton, Governor of Oklahoma, down on the program, so he thought, as "King Jack."

It may slightly discomfit my present audience to know that Walton was at one time a member of an engineering firm known as McIntyre & Walton. To the credit of engineers at large I hasten to add that he was not so much an engineer as a promotor. His political career began when he was elected Mayor of Oklahoma City. On the expiration of his term he ran on the Democratic ticket for Governor of the State and was elected by a fair majority.

His election was due quite largely to the support of the Farm Labor Reconstruction League, a socialistic organization of somewhat more than pink tint. This support was secured chiefly through the efforts of George Wilson, a radical political organizer, who had

By RICHARD G. TYLER, '10

*Associate Professor of
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been invited to leave another state because of the undesirable character of his activities. Wilson was a man of little education, but with a dynamic personality which appeals to a certain type of mind, and had a strong following among the Farmer-Labor element.

Walton first attracted widespread publicity by having an enormous barbecue at his inauguration. A beef to be barbecued is cooked on bars or poles over fire in an open pit. Hundreds of beeves were slaughtered for this ceremony and the preparations for it were made upon so large a scale that a trenching machine was used to prepare the necessary trenches. Several railroad tank cars were cleaned out, fitted up with steam cocks and used as percolators to prepare coffee for the multitude. The extravagance of this entertainment gives a fair picture of the "inflated ego" which Walton thus early showed in his administration.

It soon became evident after the tumult of inauguration had died away that the Governor was not friendly to educational institutions. He cut large amounts from educational appropriations passed by the legislature, and at the same time allowed many increases in departmental appropriations. But the extent to which he contemplated playing football with the colleges of the State did not become evident until Wilson demanded, as payment for his services in swinging the League vote to Governor Walton's support, the Presidency of the Oklahoma Agricultural

and Mechanical College, stating that he knew the problems of the farm and was therefore equipped to administer efficiently the affairs of the college. Walton acceded.

Now the College was, and still is, under the jurisdiction of the State Board of Agriculture which is composed of a President, elected by the people, and four members, appointed by the Governor. This Board very promptly and properly refused to carry out the wishes of the Governor, whereupon Walton ousted certain members of the Board, regardless of the fact that their terms of office had not expired, and appointed three henchmen who could be depended upon to do his bidding. The new Board appointed Wilson, to his coveted presidency, although the Governor, with characteristic lack of stability and sincerity, stated at the last minute that he would not support Wilson's appointment. But he did not change the Board back to its original personnel, and consequently the arrangement took place according to the Governor's original instructions. Wilson was appointed President in the latter part of May of this year in place of J. B. Eskridge, who had been President since 1921.

The Governor's attempt to shift the responsibility for this act did not mislead the public. By this time he had had considerably clarified his intentions by appointing enough new members of the Board of Regents of the State University to give him control of that as well. These Regents were instructed to "get a new President" and to make numerous other changes in personnel. The President of the University, Stratton D. Brooks, beat Walton at his own game, however, and resigned to accept the Presidency of the University of Missouri at a substantial increase in salary. The loss of President Brooks so soon after the dismissal of Eskridge was a severe blow to the State.

In the meantime, Wilson, with the appointment to the Presidency of the A. & M. College in his pocket, was so anxious to take into his own hands the administrative reins of the institution that he could not wait until July 1, when the new fiscal year began, and at which time the contract of President Eskridge expired, but got the Board to make his appointment effective beginning June 1. This put the college in the unusual situation of having two Presidents. The controversy over who the official President might be was referred to the State Attorney-General, who ruled that the Board of Agriculture had authority to appoint a president any time, but the contract of President Eskridge was valid and that his salary should be paid until July 1.

Thus fortified, Wilson left for Stillwater, where the College is located. There had been some rumors to the effect that the students expected to stay at Stillwater (the scholastic year had ended a few days before Wilson's arrival) and tender their new President a tar and feather reception. The majority of the students, however, were not in sympathy with a resort to farce or physical violence. Wilson, hearing these rumors, took no chances. When he arrived in Stillwater to demand the keys to the institution he was accompanied by an armed guard. The College and the citizens took rather unkindly to this guard, and a few days later

Wilson had the sense to withdraw it.

To throw a little sidelight on Wilson's character, let me relate my own experience with him. The day after his arrival, I called at his office and introduced myself as Dean of Engineering. I knew that he had probably seen a letter which I had written the Governor pointing out some of the harmful results which would probably follow Wilson's appointment, and most earnestly urging the Governor not to appoint him. So I told him that I had come over to lay all my cards on the table and to learn what he had in mind for the future of my school, that if he wished my resignation, I would get the records of my office in shape to turn over to my successor, but that if he wished me to stay, I would try to hold my faculty and students together. Many of the faculty had resigned when Wilson was appointed, but others (and I was among them) believing that Wilson could not long remain, wished if possible to stay, out of loyalty to the

College and the desire to prevent its complete disintegration. Wilson stated that he had not made recommendations to the Board in regard to my position but would let me know in a few days. I heard nothing more from him, but about two days later I saw from the press that my successor had been appointed. This was the way in which he let me know I was no longer wanted. About half of the faculty was dismissed at this same time.

In the meantime, students and some faculty members had gone in a body to Oklahoma City to protest to the Governor. He took rather unkindly to this visit, and termed it a "mob demonstration." He stated that he would tell the people of Stillwater and the students "when to get up and when to go to bed." The faculty members who participated in this demonstration were immediately dismissed. Despite the result of this protest more and more pressure was brought to bear upon the Governor to remove Wilson. Wilson, while busy



R. G. TYLER, '10

The amazing story of Oklahoma is of particular interest to Technology men since Richard G. Tyler, '10, was Dean of Engineering at the Oklahoma Agricultural and Mechanical College at the time when Governor Walton began his unique gubernatorial career. Upon the enforced removal of Walton's hand-picked

President of the College, Professor Tyler was elected as Temporary President, and served until he left, on October 1, to become Associate Professor of Sanitary Engineering at the Institute.

Professor Tyler's article is of remarkable timeliness, since, as these words are written, the announcement is made of Walton's removal from office as the result of impeachment proceedings against him.

Since, one year ago, John Calloway Walton was elected Governor by one of the largest pluralities in State history, and brought his brass band and his policemen into the capitol with him, the State has gone numb to the sensational.

Professor Tyler's article deals with the less widely known manner in which the Governor sought to interfere with educational institutions.

in changing the College to little more than a vocational school, had found time to antagonize the American Legion by making the statement that he would like to "shoot a hole in every Legion button" which he saw. Now, to the combined antagonism of college alumni and students, was added that of the American Legion. Many students, stating that they did not care to have on their diploma the signature of a man who did not himself hold a college degree, arranged to go to other institutions in the fall, and many well-esteemed faculty members, who had not been reappointed, secured positions elsewhere, thus influencing students to decide against return to the College.

By now the antagonism against the Governor had grown to such proportions that talk of impeachment was begun. This, the Governor countered with threats of martial law. His first threat, I believe, was to place institutional towns under martial law and commandeer supplies and the services of instructors. Few, however, believed that this was more than a bluff to check the talk of impeachment.

Walton's policy of pardoning criminals indiscriminately had caused a growing discontent throughout the State. It began to appear that any convict who had influential friends could get a pardon regardless of what his crime had been. Naturally, this tended to increase criminality and some of the courts refused to consider the cases on their dockets until such time as there was some probability that the felons whom they convicted and sentenced would have to serve at least a fair portion of their sentences.

This gubernatorial policy had one highly interesting application at the College. At the request of President Eskridge, who suspected certain irregularities, the State Banking Commissioner undertook an audit of the accounts of the Financial Secretary of the College. The completed audit showed a shortage which totaled more than \$100,000 and the College authorities expected to have the Financial Secretary sent to the penitentiary. He never was. It was stated authoritatively at the College that the Governor had arranged that a pardon would be in the hands of the offender before he reached the penitentiary. The matter was held in abeyance awaiting a time when the meeting out of justice might reasonably be expected. In the meantime, the Financial Secretary was dismissed, but, it appears, was immediately placed on the State payroll with a good salary, as a special police officer.

By this time opposition to Walton had become so bitter that he decided he would do well to acknowledge his blunder in appointing Wilson as President of the College, and have him removed. He reorganized the Board of Agriculture, therefore, and replaced two of his former appointees by very acceptable and public-spirited citizens. At the first meeting of the new Board, Wilson and a number of his appointees were dismissed and I was offered the position of Temporary President of the College until the Board could find a permanent incumbent.

Since I had already accepted the position which I now hold, I agreed to accept the position only until October 1. I may state that I did not find a guard necessary when I called at the President's Office to



"KING JACK"

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John C. Walton, Governor of Oklahoma, who is the principal actor in Professor Tyler's drama of educational intrigue.

take over from Mr. Wilson the administrative affairs of which he had had charge during June and July. He treated me very courteously and cordially.

The task which now we faced at the College was considerable. It was necessary first completely to reorganize the faculty, take care of all of the financial matters of the past two months, (for the financial office had failed to function under Mr. Wilson) notify all former and prospective students that we were back on the old basis again, with the advantage of considerable advertising, such as it was, and invite them to return. This had to be done between August 1 and September 11, at which date the College opened. The success of the campaign may be judged by recently published statistics which show an increase in this year's enrollment of 10% over the enrollment of last year. This increase was due largely to the loyal efforts of the student body. I mention it to show that the College is on a firm footing once again and has not suffered from the turmoil through which it has passed.

The reorganization of the faculty was made unusually difficult by the numerous interferences of the Governor and his attempts to name appointees. We did not desire to antagonize him too greatly until after all faculty members had signed contracts for the coming year, since we knew that he was likely, at any moment, to reappoint his old Board members and reinstate Wilson at the College. This, indeed, was just what Wilson was trying very hard to bring about.

Walton placed Tulsa under martial law about this time, and began his attacks upon the Klan. With neither the Klan nor the Governor's attacks upon it am I, in this article, particularly concerned. Although I strove to maintain the same lack of concern during my incumbency at the College, circumstance did not allow me success. I had the misfortune to be dragged head-first into the Klan trouble through the instrumentality of one of Walton's proteges, Gallion by name, who was Superintendent of Buildings at the College. Apparently, a group of men met one night on the athletic field, and Gallion, having learned of it, made certain statements to

reporters of *The Tulsa World*, which thereupon published a sensational article, based on conjecture, under the usual front-page caption. It was an article to the effect that the College, through myself, had given the Klan permission to meet on the College grounds, to use State property and buildings for their meetings: all in all, a very interesting article. Gallion, who was a union labor organizer, had already cost the College a considerable amount of money and given it much inconvenience. He was consequently called in and told that his services would not be desired after October 1. We did this in spite of the fact that Walton had insisted that the Board and I retain Gallion in office although we had previously expressed the desire to let him out. Gallion agreed to resign, and then immediately went to Oklahoma City to call on the Governor concerning his dismissal. On his return he wrote me a long, melodramatic letter, stating that the Governor had told him not to resign, that he would continue in his present position until the "governing body" of the College should put him out, that he would find out if I and the Board, and the citizens of Stillwater, were permitting the Klan to use State property for their meetings. And so on, for about two typewritten pages. Naturally, there was about one thing to do. That was to fire Gallion immediately. I did.

This placed the Board in an embarrassing position despite which it supported me. To help clear away the smoke, however, it became necessary for me to

issue a statement to the press to the effect that I was not connected in any manner with the Klan, that the Klan had nothing to do with Gallion's dismissal, and that he acknowledged to me that he was working under orders direct from Governor Walton, and was, as he stated it, "trying to throw the skids under the College authorities."

That, so far as I know, ended for a time, at least, the troubles of the Oklahoma A. & M. College. On October 1, I left it for Massachusetts and the roar of battle in my former State reaches my ears now only through the faint echoes of the newspaper's front page. For "King Jack," his proclamations, his machine-guns, his shoot-to-kills, the end has been impeachment. The State of Oklahoma, brought to the verge of civil war will, I believe, have peace and quiet soon again.

As for myself, stepping so abruptly from two months of strenuous activity when each day brought forth occasions demanding prompt, effective and often energetic or even drastic action, which, at the same time, had to be sugar-coated as much as possible by diplomacy, into the quiet but busy serenity of Technology with its dignity of tradition and stability of government, has been a particularly pleasant experience. Each situation has its advantages, but my personal preference is to expend my energies along the lines of educational endeavors. After all, the branch of Engineering in which I am engaged, is Sanitary, not Military.

Fraternity Standings

The relative standings of Technology Chapters for the past two and one-half years

The numerical position attained by the fraternity chapters in June, 1923, is shown by the second column of figures, but the names are arranged according to the excellence of the "cross-country" record of the chapter. The chapter, which since June, 1921, has accumulated the smallest total number of points in the five listings, stands first.

Since June, 1921, standings have been computed twice a year: at the end of the first and third terms a numerical equivalent is assigned to each of the literal marks given to a student and this is multiplied by the number of credit hours in which the student has obtained a record. Thus, 100 hours of *H* score 1000, but 100 hours of *F* score only 300. From the individual records thus obtained, the total score of the chapter is determined and this, divided by the total number of hours carried by the chapter as a whole, gives the average factor for the fraternity. From this, its relative position is determined.

	Total	June 1923	Dec. 1922	June 1922	Dec. 1921	June 1921
1. Tau Delta Phi	18	2	3	3	7	3
2. Sigma Alpha Mu	24	1	1	5	15	2
3. Delta Psi	24	5	4	2	5	8
4. Zeta Beta Tau	29	7	9	9	3	1
5. Sigma Alpha Epsilon	47	8	17	8	8	6
6. Chi Phi	48	14	7	4	19	4
7. Theta Chi	49	10	13	15	1	10
8. Phi Kappa Sigma	50	3	6	6	16	19
9. Delta Kappa Epsilon	55	9	8	12	4	22
10. Phi Beta Epsilon	71	15	25	11	6	14
11. Sigma Chi	74	18	27	16	2	11
12. Alpha Tau Omega	75	22	22	17	9	5
13. Phi Beta Delta	80	16	19	7	14	24
14. Beta Theta Pi	86	26	20	14	10	16
15. Lambda Phi	87	29	24	10	17	7
16. Delta Tau Delta	88	23	12	21	11	21
17. Phi Gamma Delta	91	13	23	19	23	13
18. Lambda Chi Alpha	94	20	21	24	20	9
19. Delta Upsilon	94	28	11	20	12	23
20. Theta Delta Chi	95	21	15	26	18	15
21. Theta Xi	100	19	16	27	21	17
22. Kappa Sigma	103	27	18	18	22	18
23. Phi Kappa	107	31	29	22	13	12
24. Phi Sigma Kappa	129	32	30	23	24	20
Psi Delta	4	5	z	z	z	z
Alpha Chi Sigma	6	*	*	*	*	*
Alpha Mu Sigma	11	2	25	*	*	*
Tau Epsilon Phi	30	10	1	*	*	*
Sigma Nu	24	14	13	z	z	z
Phi Mu Delta	17	z	z	z	z	z
Phi Sigma Delta	12	26	28	25	*	*
Phi Lambda Alpha	25	28	z	z	z	z

* No standing reported.

z Chapter not established.

The Engineer's Place In Society

*The first of the Aldred Lectures, delivered at the
Institute on November 9*

I approach this task this morning with great humility. You might say that I am exhibit number one in Mr. Aldred's collection of trained animals. But when I received the invitation to speak before you, I could not resist the temptation, not to *talk* to you, but just to *talk with* you, because first of all I am a Tech man, and my great fondness and indebtedness to the Institute has gone through life with me. Among the audience here this morning I find old classmates of mine and professors under whom I worked, and their faces carry me back most happily to those old days.

I accepted this invitation, too, with a great deal of humility, which was borne in on me particularly when Professor Bush wrote to me and said, "What is the title of your talk?" I had not thought of a title. I myself am an illustration of something that Mr. Aldred has said: that sometimes engineers stumble upon things as much through luck as common sense. I suggested the title as "The Engineer in Society; his Relations to Society." It was only when I came to think that Mr. Aldred had made possible this course of lectures that I began to think, "What has Aldred done for society?" Then I found there was something else besides common sense that made me stumble upon that title. I think you will agree with me that it was particularly well chosen, and through no fault of mine. There could not be anyone better fitted than Mr. Aldred to have inaugurated this course and to have made it possible for Technology, especially from the standpoint on which I am going to speak of it. He has really been a pioneer in things which have meant much for mankind.

Up in the woods and wilds of Canada, a wonderful country of pines and rocks, where, when it was only a wilderness, I had been camping some years ago, was a river with a large water power, some 600,000 horsepower, constantly going to waste. Through Mr. Aldred's vision and leadership and courage (and common sense if you will), these water powers were harnessed. Now, let us see what that has done. That wilderness has been transformed into the habitation of man. Here men have reared their families; schools and churches have been erected, and a community has been founded where before, only wild animals roamed. Constructive industries have been placed there, paper and pulp, and metallurgical activities, which were never before there. But more than that: these industries have not only done things for that particular community where men and women are now living in happiness and contentment, but also they are sending their products out to the world and making it possible for human beings to seek and to find more than they ever had before.

I do not know of any greater contribution a man can make to human beings,

By GERARD SWOPE, '95
President, General Electric Company

and the community of which he is a part, than a contribution of that kind. That is really great constructive work. It has taken vision; it has taken imagination; it has taken great courage; and it has taken common sense in the working out of the details.

Today from a possible source of some 600,000 horsepower, approximately half has been harnessed for the useful work of man. That is the work Mr. Aldred has done. That, it seems to me, is the reason why it is so fitting that he should have inaugurated this course. He has given to men who go out in life to do work similar to that, an ideal that is before every man, that makes for inspiration and makes for service to human beings.

As I traveled over the country this spring (as I must



GERARD SWOPE, '95

President of the General Electric Company who delivered, on November 9, the first lecture of the special series recently established at the Institute by Mr. John E. Aldred. A biography of Mr. Swope, by Willis R. Whitney, '90, appeared in the Technology Review for November, 1922, under the title of "G. Swope, Helper."

do in the course of my work), I found other similar examples, and I am going to speak of one or two of them; not because they are exceptional or alone, but simply because they carry that message to me and I hope they will to you, if I can portray it. If I cannot, it is the vehicle that is wrong: the idea is there.

I shall travel now from Canada, around Quebec and Montreal and the St. Maurice River, far down into southern Arizona. This engineering project that I shall speak of, is not nearly so large as these projects in Canada that Mr. Aldred has founded, but it is no less interesting. It is the Roosevelt Dam, made possible by the courage and vision of government engineers. That section of the country was all an arid desert on which nothing could grow. But the soil is one of volcanic formation, and all that it needs for productivity is water.

The rainfall in that region is about six inches per year, insufficient to irrigate and insufficient to grow anything except cactus and sage brush. So the engineers built a dam 226 feet high, to contain the water gathered from the watershed and the mountains and hills behind it, thus forming a lake some 70 miles in area in which collected the rainfall from about five million acres. The dam lets out the water and irrigates about a million acres, which gives an annual water supply of about 36 inches for each of those acres. The line of demarcation between the land that is irrigated and the desert land that is not, is as sharply defined as the edge of this table. Where the water has come, vegetation of various sorts, alfalfa and other grasses, thrive and flowers bloom in great profusion and great beauty; on the other side, where the water has not, the land is as arid as it was for centuries and centuries before. Into this valley there have moved hundreds and thousands of people, who are now cultivating the soil. They have erected comfortable homes and are rearing their families in comfort. This water, of course, that comes over the dam, as it goes through the water-wheels, produces electricity; so that the dam is not only furnishing the water for irrigation for this region, but is also producing power for its industries (there are copper mines near there) and produces also power and light for use on farms and homes. Thus the people who are living in these homes have the comforts that you have here in Boston, so far as electric lights and other appliances are concerned. The people working on the farms have more industrial appliances than the people who are working on the farms of New England. It is simply because this cheap power has been created. The amount of money that these works cost was not very great — some twenty millions of dollars, I think, which was defrayed by the Government. The people who are using this water now are paying so much per year per acre-foot of water, which is sufficient to pay for the cost of management of the enterprise plus the interest and amortization of the bonds, so that after a certain period the entire bonded indebtedness and the money that the Government has put into the project will be paid back.

But furthermore — and this is really quite instructive — the Water Users' Association of that territory has its own management and its own engineers. The Government has put the responsibility into their hands, but they have seen its possibilities, so that now, sixty-five miles below the first location, they are building another dam to accumulate the waters between the first dam and the second, very much as they do on the St. Maurice River or at any great power development.

Here, of course, the plans are primarily for irrigation and not for power.

Now, this it seems to me, has done two things. First, it has made a part of the earth's surface habitable, which never before was habitable. It has made it useful for the purposes of man, which it never was before. Second, the products of that territory are now going for the use of mankind in other states, at a lower cost, and a wider distribution than ever before. That, it seems to me, is another type of great constructive enterprise, one that has brought happiness and comfort and a greater amount of well-being, not only to the people who are doing the work, but to the people whose needs the enterprise is serving.

From here I am going to turn just for a moment to the Northwest. (I am just taking these various illustrations, not that they are at all comprehensive, not that they are at all typical, but simply because they have come up in my horizon as I have traveled around.) In Portland, Oregon, the country of our tremendous logging operations, I went to a paper-and-pulp mill of the character that Mr. Aldred has established on the St. Maurice River. I talked to a man who had spent fifty years of his life in paper-and-pulp mills, first in the East and then out there, going there as a pioneer in the development of the business. He told me this story, which seems to me worth while telling here. I assume that you know of the process of paper-making or, at all events, you know the last process, in which the pulp, dissolved in water, passes in a thin film between rollers which squeeze the water out, so that finally the paper fibres adhere to one another and form the finished sheet. It is essential that these rollers should run somewhat in synchronism, so that no great strain is put on these weak fibres as they run through the rollers. This man told me that their machine had formerly been run at about fifty feet a minute. He says he remembers the time when the superintendent suggested that they run it sixty feet a minute. There was a revolution in the shop; it had never been done; they couldn't do it; things would break down; you never could make paper that way. But to make the story short, it *was* done, and done successfully. But the interesting thing is that today these machines are running a thousand feet a minute with synchronous electric motors. That produces better paper, and twenty times as fast.

By this production, twenty times increased — a thousand feet a minute against fifty — you have done several things. You have, of course, cheapened the cost of your paper. Now cheapening the cost of paper has a tremendous significance, especially in a country like our own, whose democracy, if it is to be successful at all, must be founded upon education and the elimination of illiteracy among its people. Therefore, you have made the production of the paper upon which your textbooks and your newspapers and your magazines are founded, much cheaper, so that they can have a much greater spread and reach a larger number of people.

It seems to me that here is the constant test of progress in civilization: does it finally, and in an ever-widening circle, reach a larger and larger number of people in the body politic or in the community of which we are all a part? It seems to me that progress in civilization means that a larger and larger number of people are constantly participating in its benefits. If they do not, civilization is not making the contribution to human beings that they may rightfully ask of it.

Now those are a few typical examples of engineering activity. After I happened to think of them and thought to speak of them to you, then I thought I would look and see what the definition of an engineer himself might be. That seemed to be a common-sense way of approaching the subject. So I looked in the dictionary. Perhaps my dictionary was out of date. Yet it is a Webster Dictionary, only a few years old. At any rate, it said: "An engineer is one who manages a stationary or a locomotive engine." That is all it said. There wasn't any other definition. There wasn't any other thought. Below that it said of Engineering, that it was "the art of managing engines; especially the art and science by which the mechanical properties of matter are utilized in the construction of machines." And that was all of engineering.

Now, of course, to your mind and to my mind, both engineer and engineering have a very much broader significance than that. Let me speak for a moment of these essentials which, it seems to me, underlie engineers and engineering.

First, it is essential that you approach any problem with a careful analysis. What are its elements? An engineer's approach is exactly that. You use your mathematical analysis to break down your proposition into its simplest elements and see what those elements are. There is no more exact method, as Professor Bartlett would tell you, than mathematical analysis. It is accurate; you can depend upon it. That is one fine thing in engineering: its basis is a thing you can depend upon.

Now after you have made that analysis, you must apply common sense to its interpretation. Here it is that this common sense, which is common and still so uncommon, as Mr. Aldred has said, comes in. Present an analysis of a problem to six different men and the six different men may see it from six different points of view and not one of them, possibly, will get a comprehensive view of the relations that the elements of the problem bear to each other. Yet it seems to me quite essential that we grasp this before we proceed to a comprehensive solution of what that problem involves.

Now after you have made your analysis and after you have made up your own mind what the answer is, what is the proper balance of these elements, you have got to have the courage to make a decision. It is remarkable, in life, how many people like to "pass the buck"; how often they would rather have the other man make the decision. I have seen that in the army — and I was on the general staff of the War Department in 1918. I have seen that in all walks of life. People often feel that if they have some one else make the decision they are relieved of it and so avoid mistakes. It takes courage to make a decision. It is not so much a conscious courage as it is faith that you have made your analysis correctly, that you have placed the proper valuation on the relations of these elements so that you may say, "Yes, that is the result of my analysis and I am going to go ahead." Of course you will come a cropper occasionally. All successful men, as Mr. Aldred says, comes a cropper occasionally. We don't speak of those things very often. Mr. Aldred has accentuated the difficulties and the pitfalls. I want to accentuate the great points from which you can look out and see the opportunities for service in this great profession that you are undertaking.

To my mind there is no better basis for human

work than study along engineering lines. Now it seems to me that if you will give to that engineer also a cultural training, so that he knows something of the history of the development of a people, of its civilization, of its tendencies — so that he can look upon these movements as they arise with some tolerance and also with sympathy, (for one needs sympathy in life) — then it seems to me that the engineer will be the best fitted of any to grapple with the problem of life.

At present there is one problem in which (I think) the engineers have done less than other men have done towards the solution of the problem of our social fabric.

That is the industrial problem. And that is one that I have very near to my heart. A comparatively new situation is the factory development of industry, where you have, brought together, a large aggregation of capital in the form of a corporation, and large numbers of people employed in the service of that corporation, with consequent questions of management arising. It is not really a question between capital and labor; it is largely a question between management and labor. I am as much an employee of the General Electric as the janitor, or the porter. I don't control the corporation, I am free to confess. I am a stockholder in it, but a very small stockholder. There are many, many larger. These aggregations have now become so large that almost no corporations (Henry Ford's is an exception) are owned or controlled by one or two men. They are usually owned and controlled by thousands and thousands of stockholders in all parts of the country, and often a large part of the stock is held by the workers themselves. The problem in industry is not now a problem between labor and capital, but between management and labor, where the manager is also as much of an employee as the laborer himself.

Now the question is how to approach that problem with justice and with sympathy to find the right solution. And there, I say, the engineer has taken but little part. He has been very largely an academic adviser. He has not got into the hurly-burly of the work to find the right solution, or how that problem should be handled to work out the best results. Yet it is an engineering problem. Here you have thousands of men engaged on work that is worth while doing for the community, work that should win their respect, work that is constructive in every way, work that should appeal to the imagination; and still largely we regard it as a task to be performed. We eliminate from it all the individuality and the personality that must go with it if men are to retain their own respect and have ours. It seems to me that an engineer can introduce into that problem a tendency to a correct solution which is something that is needed very much indeed.

And here is another thing. I think that the wages that are paid to workmen are an indication of the civilization of a country. There is nothing inconsistent between high wages and low costs. Merely you must see to it that your high wages are more largely productive. Now that is a question for engineering and management. Engineering must be on a constant search for better methods of production, must work for the introduction of automatic machinery, introduction of labor-saving devices. It is constructive, and in the interest of society, to eliminate human labor and to replace it by machinery. Labor will admit that. Of course it sometimes works a hardship, in the transition stages, upon the labor immediately engaged; but as far as labor itself, and society as a whole is con-

cerned, there is not a doubt that if you can reduce human effort by the introduction of machinery, you have marked another milestone in the progress of human affairs. It is not at all inconsistent, as I say, that you should have low costs and high earning power on the part of your men. But this does require, on the part of engineers, an increased responsibility for finding constantly better ways of doing things.

I am going to illustrate that by some work that has been done (this is a reference to General Electric) on the incandescent lamp. The primary inventions of the incandescent lamp have been associated particularly with three men, two of whom are Technology men — Willis R. Whitney of the Class of 1890, and William D. Coolidge of the Class of 1896. (There is another man, also, Irving Langmuir, but he doesn't happen to be a Tech man, so I won't mention him.) Those three brilliant men are on the staff of the Research Laboratory. They set themselves the job of finding a better source of light, consuming less energy and therefore costing less to the community, that a larger class of people might enjoy its benefits. They have solved that problem and the patents have been recognized in the courts of the United States and in the courts of other countries, so that they are now the basis of the art throughout the world today. That is scientific work of the highest type. Dr. Langmuir's work in pure science is world-acclaimed. But that is beyond most of us. Common sense does not touch that. That is brilliance, that is genius. It is given to but few people to accomplish that kind of work. But subsequent to that came the necessity of applying engineering methods to the problem of production — the problem of utilizing those discoveries to best advantage. That has been accomplished by the introduction of automatic machinery. Almost within the last year that industry has been revolutionized, and now we are on the way towards getting a much greater output per machine operator with less effort, a much greater output per square foot of floor space, and a much greater

output in number of lamps per thousand dollars of capital invested. From every point of view we have made a great constructive forward step in introducing better methods, more automatic machinery, decreasing the labor content and therefore decreasing the cost by increasing the output for a given amount of effort.

There is an example of the application of pure engineering, of pure common sense, to an industrial problem. It has not been made by any one man; it has been made by a group of men working to solve that general problem. I used the lamp illustration because it is typical. It is going on in all industries. It is going on in the production of motor cars, in the production of generators, in the production of motors, dynamos and everything else. Wherever engineers are applying their minds to the problem of doing better work, where they are showing that decreased cost of production is not incompatible with increase of wages to labor, they are helping in the general progress of humanity. When this problem of establishing better relations between labor and management is solved, when men find greater pleasure in the work they do, and receive remuneration commensurate with the service they are rendering, the engineer will have performed his greatest service. For this service to the community, this broad service to society, it seems to me, the engineer's training has fitted him better than any other profession is fitted. This tremendous field lies before you, and in service of that kind, any human being will find the best satisfaction and the greatest happiness. If you can all make contributions that will reduce human effort in production so that goods may be made at less cost, and will be available to an ever-increasing group of people, you are going to distribute to an ever larger number of people that happiness and comfort and well-being which spells progress to civilization, and the onward march of any community of which you happen to be a part. That is the finest contribution that the engineer can make to the problems of society.

Future Aldred Lectures

The next five speakers to follow Mr. Swope in the Aldred Lectures were tentatively announced on November 10. The program is at present incomplete and is still subject to change. The list follows:

November 23:

Julian C. Smith, Vice President and General Manager, Shawinigan Water & Power Co.,
Montreal, Canada.

December 7:

J. W. Lieb, Vice President, New York Edison Co.

December 14:

Wm. E. Nickerson, Director, Gillette Safety Razor Co.

January 4:

Dr. F. G. Cottrell, National Research Council.

The One-Hundredth Meeting of the Council

Technology's Bundesrath debates but little; Walter Humphreys gets watch, but must supply own chain

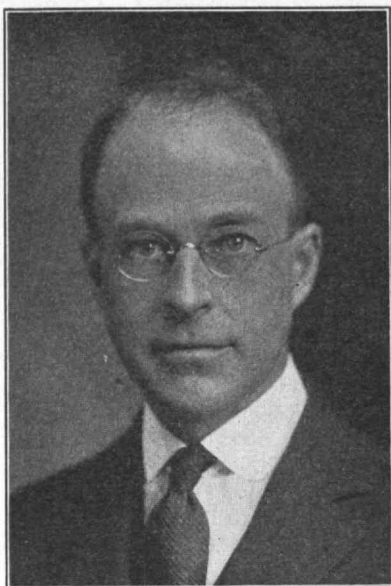


Photo by Notman

Walter Humphreys, '97, who, after sixteen and one-half years as Secretary-Treasurer of the Alumni Association, was finally given a watch

II

There is no lion-tamer but will tell you that he has won his fame by kindness, not by fear. Orville B. Denison, '11, Executive Secretary of the Alumni Association, extended the application of this principle considerably and, it would seem, strengthened its validity by coming out flat-footed with the statement in his usual notice that members of the Council were "cordially urged" to attend the One-hundredth Meeting.

This was a bit daring. Time was when we could remember that members were not even urged to attend meetings, much less cordially. They were not even invited. They were told that there was to be a meeting and left to arrive by inference at the conclusion that if they came to it no one would throw them from a window in the Faculty Dining Room.

The cordial urge brought seventy-eight members (who constituted 53%) of the Council to dinner at Walker Memorial at 6.30 on October 29.

Since the Faculty Dining Room in Walker Memorial will not hold seventy-eight members of anything, the dinner and meeting was held in North Hall. This in many ways resembles the Pole of the same name, but despite the similarities, the Council was able to make its One-hundredth Coming-Together an affair of moment.

The thoughtful management supplied all members with identification plates before the evening began. Happily, they proved unnecessary since no member so far forgot himself as to lose track of his personality. A well authenticated rumor suggests that they were supplied at the insistence of J. C. MacKinnon, '13, Registrar, who is tired of being mistaken for Richard Barthelmess. However this may be, the badges, if they served no useful purpose, at least added to the spirit of pageantry which pervaded the evening.

Mr. Denison contributed his usual musical numbers. His original program included MacDowell's "Sonata Eroica" (Third Movement, A minor), a Chopin Etude, Opus 10, No. 3, Berlioz' "Racoczy March" and the Overture from Lalo's "Le Roi d'Ys." At the last moment Mr. Denison changed it to "The Stein Song," "Take Me Back to Tech" and "Dear old M. I. T.," all of which were well received.

When the dinner had worn on to salad time, Mr. Gilmore rose and introduced Dr. Stratton, whereat the Council cheered lengthily. Dr. Stratton began his

remarks by a recounting of the experiences of his summer in Europe. He spoke of the excellent condition of technical education in England and France and of the remarkable manner in which Germany, despite its heavy burdens, is scientifically holding its own.

In our own country, said Dr. Stratton, technical schools must bend all their efforts towards meeting the continually increasing demand for engineers. He spoke of the figures of the National Industrial Conference Board which predicted that in 1930, 400,000 positions would be open to the 50,000 technical students now enrolled in this country.

"We have at present an enrollment of 2,954," said Dr. Stratton, "yet I am convinced that in our present buildings we could economically take care of 3,500 students, and if they were students of high calibre, it would be a most desirable thing for the Institute. We must not, of course, yield to the temptation of measuring our success by our numbers. We want students of good minds, and I know of no way in which the Alumni can be of greater service to the Institute than by, say, the establishment of local scholarships designed to encourage capable students to come to this institution. Surely this is a more admirable means of increasing numbers than the subsidization of high school teachers to which so many institutions descend."

Dr. Stratton expressed considerable contempt for the idea that the Alumni should be continually "dunned" for money. A jealous regard for the reputation of their Alma Mater, and an earnest desire to further it in any way, was, to his mind, the most valuable asset an institution could obtain from its alumni. If it possessed that, momentary troubles were not likely.

The problem of publicity likewise claimed his attention. The loud pedal method of obtaining attention made no appeal to him.

"An architect said to me not long ago, 'Of course, Technology turns out the best architects there are.' Publicity springing from that sort of opinion is the kind we want — the kind that is of value to us. Spectacular newspaper spreads are of little value. Our best solution of the publicity problem is quietly to do worthwhile things."

Dr. Stratton spoke, in addition, on the problems of increasing the building area without encroaching upon the "playground", of giving more physical exercise to the average student and of beautifying the present pebbled desert of the Great Court. He sat down, after about fifteen minutes of speech packed close with interesting ideas and close detail, to the accompaniment of much cheering.

Then there followed an intermezzo. Mr. Denison once again seated himself at the piano-forte, prepared to play his own transcription of Stravinsky's "Le Rossignol" but was persuaded at the last moment to substitute "The Red and Grey," following which everyone applauded (save the performer) and waited nervously for the ice cream. Finally, it arrived, bating one trayful which a youthful busboy had fallen downstairs with, at hearing Mr. Denison accidentally augment a normal interval of the seventh.

A combination of circumstances served thus to delay President George L. Gilmore's initial curtain. The 7.45 p.m. Business Meeting began at 8.30. It began with Mr. Gilmore's own announcement that the Annual

Dinner of the Alumni Association would be held on January 5, 1924, in Walker Memorial. W. R. Mattson, '13, as Chairman of the Committee on Assemblies, reinforced this information. Mr. Gilmore then announced that the November Council Meeting would be held at the Engineers' Club. There was more news value in this speech than, perhaps, Mr. Gilmore recognized, for he passed speedily on to consideration of a joint meeting (heavens!) with the Faculty Club, the statistics of sustaining membership and the announcement that former Professors, not Institute graduates, were now eligible for membership in the Alumni Association. Then he introduced A. W. Rowe, '01, to the still gasping Council. "How about the athletic situation, Allan?" asked Mr. Gilmore, who is an informal presider. "We'll give you a minute and a half."

"I'll take you up," said the Doctor. "The cross-country team walloped Cornell last Saturday." He sat down, with one minute and twenty-four seconds of his allotment still unused. The Council utilized the rest of it cheering him and his news — "applauding his facts while deploring his brevity," as the doctor himself might phrase it.

A. T. Hopkins, '97, Secretary-Treasurer, then spoke briefly on the personnel methods which he has used in dealing with Council members. He then proceeded to introduce nine new members to the assembly, beginning with the Japanese Envoy, H. P. Talbot, '85, who, obviously, was still deeply affected by the recent earthquake. Dr. Talbot, and the eight following, rose as their names were called and remained standing until modesty prompted them to sit down. Then the following new appointments were announced: Atlanta Association, M. I. T., Thomas B. Booth, '95; Technology Club of the Merrimack Valley, Charles H. Eames, '97; Technology Club of Taunton, A. Loring Swasey, '98; Southeastern Technology Association (Firmingham), Frederick Bernard, '17.

Following the Secretary came the Executive Secretary. He presented to the Council his November itinerary and proceeded therefrom fluently but in a manner that defies the easy synthesis of the copywriter. The notes of the Review's young man do not help him particularly, but he reproduces them here, that readers may catch the spirit, if not the sense: . . . Elections . . . more elections . . . see min-

utes . . . trip . . . fine trip . . . old friend Bill Kelly . . . 85% of club present . . . that's the kind of a club they are . . . pitched quoits at Paul Litchfield's . . . the little town of Hudson . . . Baltimore . . . additional ideas . . . oh, yes, indeed . . . Postponed Manchester at request of Secretary . . . one pint and twelve fluid ounces. . .

The Review's young man is rather abashed at finding this last notation in his record. He has no recollection of hearing Mr. Denison say these words, yet what bearing they have on his own affairs he cannot say. The rest is undubitably an authentic if unintegrated record of the Executive Secretary's remarks.

On Mr. Denison's conclusion the discovery was made that there were no committee reports. None there was but smiled bravely despite this news.

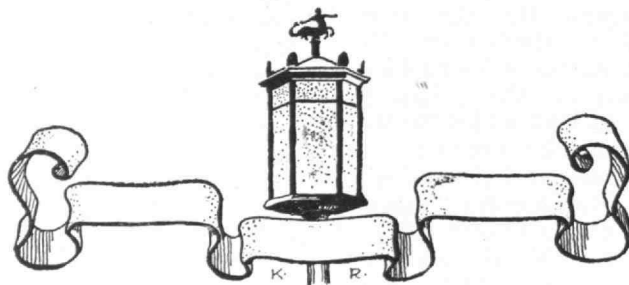
The feature of the evening came next, when Walter Humphreys, '97, for sixteen and one-half years Secretary-Treasurer of the Alumni Association, read a paper on "The Development of the Alumni Association," which harked back to Walter B. Snow, '82, I. W. Litchfield, '85, and the other giants of those days. The paper, which will appear in full in the January 1924 issue of the Review, will not be further particularized here.

At the conclusion of Mr. Humphreys' address, H. J. Carlson, '92, President, last year, of the Alumni Association, rose for a speech which rapidly materialized into a watch, presented to Mr. Humphreys by the Council as an attempt at appreciation of his services. "In his ears," said Mr. Carlson, "this watch is going to say, Tech, Tech, Tech——"

This *bon mot* took so startlingly well that Mr. Carlson discontinued speech and tendered his gift. Mr. Humphreys assured the Council that his heart and his watch would beat synchronously always.

Whereupon, Mr. Gilmore adjourned the meeting, thereby stimulating (not Mr. Hunter but) Mr. Denison to further speech. He read a poem by Kaludy Spalding, '89, a letter from R. H. Richards, '68, and a night letter from M. L. Emerson, '04, standing, the while, upon a chair better to dominate the gathering.

At final adjournment the hands of Mr. Humphreys' watch pointed proudly to 1:13. The corresponding Eastern Standard Time was 9:45.





ROUEN: THE HALF-TIMBERED STAIRCASE

From a water color by Samuel Chamberlain, '18

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TECH MEN IN THE PUBLIC EYE

SAMUEL C. PRESCOTT, '94



Photo by Fay S. Lincoln

The Head of the Department of Biology and Public Health has set his imprimatur upon the coffee bean

"Coffee is a beverage which, properly prepared and rightly used, gives comfort and inspiration, augments mental and physical activities and may be regarded as the servant rather than the destroyer of civilization."

Prof. Samuel C. Prescott, of the Massachusetts Institute of Technology, after three years of scientific research on the subject, made this sweeping reply to those who have been attacking coffee. The occasion was the annual convention of the National Association of Coffee Roasters meeting in Boston.

As head of the Department of Biology and Public Health, Professor Prescott had direct supervision of the long study which cost \$40,000 to make. During the continuous experiments an entire laboratory was given over exclusively to purposes of coffee research and more than 1,000 reports were reviewed and digested.

"It may be stated," Professor Prescott said in his address to the convention, "that after weighing the evidence a dispassionate evaluation of the data so comprehensively surveyed has led to no conclusions that coffee is an injurious beverage for the great mass of human beings but on the contrary that the history of human experience as well as the results of scientific experimentation point to the fact that coffee is a beverage which properly prepared and rightfully used gives comfort and inspiration, augments mental and physical activi-

ties and may be regarded as the servant rather than the destroyer of civilization. The time and place do not permit a recital of the great masterpieces of literature, music and art which have been produced under its beneficent exhilaration or more than a suggestion as to the place caffein containing beverages take in the dietary of the progressive nations of the earth.

"Coffee if properly prepared has a remarkable stimulating and fatigue-relieving effect due to the action of the caffein which acts on the central nervous system. It promotes heart action, mildly increases the power to do muscular work and increases the power of concentration of mental effort and therefore is an aid to sustained brain work. It has no depressing after effect. It is not habit-forming and does not require continually increasing quantities to give satisfactory stimulation. The action of caffein might be likened for purpose of visualization to lubrication of machines although the analogy is not perfect."

—Ashland (Ohio) Times-Gazette.

FREDERICK G. CLAPP, '01

Upholding the contention of Albert B. Fall, former Secretary of the Interior, and Secretary of the Navy Denby, two expert geologists, James O. Lewis and Frederick G. Clapp, reported today to the Senate Committee on Public Lands and Surveys, Senator Smoot (Utah), chairman, that the Teapot Dome naval reserve in Wyoming, leased to the Sinclair oil interests, has been drained by private interests in the Salt Creek district nearby.

The report of the experts employed by the committee, who made an investigation of the oil reserve, caused a sensation when submitted to the Committee authorized to investigate the making of the lease after it was charged by Senator Kendrick (Wyo.) and others that it was a "shameful and unnecessary destruction of the final reserve of the navy."

Defending the lease, Secretary Fall said it was necessary to reverse the policy of the Navy Department to save the oil for an emergency, because the reserve was being drained by private oil interests in the Salt Creek district. That contention was ridiculed last winter by opponents of the lease and was dismissed as a weak justification of Mr. Fall's act.

The report of the geologists supporting the contentions of Mr. Fall to an extent "took the wind out of the sails" of the opposition. Mr. Fall was present at the hearing ready to testify, and he listened to the reading of the conclusions of the experts. The Sinclair interests were not represented at the hearing, but it is said they will be called upon to testify.

Although the Bureau of Mines had estimated that the Teapot Dome reserve would yield from 135,000,000 to 200,000,000 barrels of oil, Mr. Lewis predicted the yield from the main bearing sands would not exceed 24,000,000 barrels. Mr. Clapp made no definite prediction, but indicated his belief that the output will be closer to 30,000,000 barrels than to 85,000,000 barrels.

Mr. Clapp said the area of Naval Reserve No. 3 is 9,300 acres. Of this, 5,600 acres are barren of oil or gas; 1,400 acres are gas bearing; 700 acres are in the

oil bearing area south of Fault No. 4; and 1,600 acres are in the oil bearing area north of Fault No. 4.

Under the heading of "oil bearing area subject to drainage or reduction in percentage of recoverable oil," Mr. Clapp said it amounts to 70% of the total probable oil bearing area of the reserve, or 1,600 acres.

Mr. Clapp considered the subject of the amount of oil existing in the reserve, and in this connection points out that Franklin K. Lane, Secretary of the Interior, on August 1, 1917, wrote a letter to Secretary of Agriculture Houston in which he estimated that Naval Reserve No. 3 contained 30,000,000 barrels of oil. Mr. Clapp points out that in 1922, A. V. Ambrose gave 5,670 acres as the probable productive area and predicted 85,050,000 barrels as the probable production of the Second Wall Creek Sand in Teapot Dome.

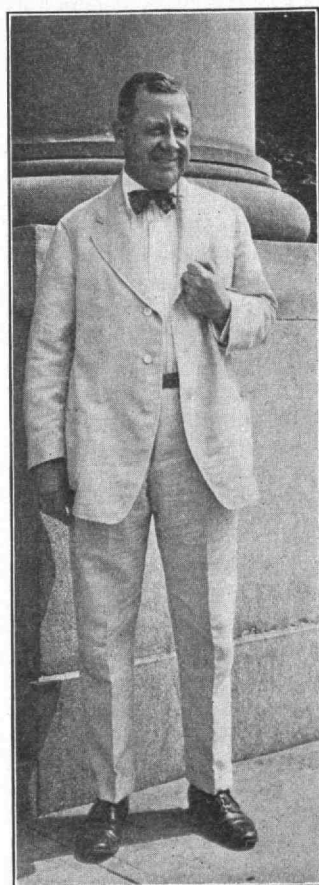
"My own estimate," Mr. Clapp said, "is nearer that of Lane than of Ambrose."

—*New York Herald.*

ELISHA LEE, '92

Mr. Elisha Lee, Vice President of the eastern region of the Pennsylvania Railroad, expresses the belief that an aroused public opinion may be relied upon to prevent strikes on the railroads, and that attempts to keep railroad men at work by statutory enactment will consequently not be needed, even were it believed that such method would be successful in application. These opinions are expressed in a paper prepared by Mr. Lee and read before the Advisory Committee of the National Industrial Council. The paper was entitled, "The Lessons of the Railroad Strike."

As Mr. Lee puts it, the logic of the situation is such that the time will come when railroad labor will be compelled to forego its so-called right to strike. He explains that because he has previously expressed this opinion, his views have been wrongly interpreted as being in advocacy of the prohibition of strikes by statute. As a matter of fact, he says, he is far from sure that therein lies a proper or desirable way of dealing with railroad labor. He thereupon outlines his ideas of what may be accomplished through the power of public opinion. He says:



©Harris & Ewing

ELISHA LEE, '92
Vice President of the
Pennsylvania Railroad

"A far better and safer course, and one which I hope to see followed, is the arousing of a definite and aggressive public sentiment which will make the conduct of a railroad strike, particularly of anything

resembling a general strike, an impossibility. Public opinion ended the shopmen's strike, after the exercise of governmental authority by the Labor Board had failed either to prevent it or bring it to a close. In a similar way, public opinion is capable of rendering a general railroad strike in the future impossible by insisting upon an attitude of fairness and sanity on both sides which will make such action needless and futile."

It is evident that public opinion has already exerted itself to keep the railroads in operation in other cases as well as that of the recent strike of the shopmen. But whether railroad workers in general recognize the obligations which the nature of their calling puts upon them is another question. Further conflict may be waged before there comes general understanding by men who run the railroads that they are in the class with the policemen and other public servants and with doctors and others in private life who perform services so essential to the public well-being that there can be no interruption of them. Ultimately, the time will come when there will be no claim to a right on the part of any body of men to tie up the transportation system of the country, but it would probably be going too far to assume that that happy day has already dawned.

—*Boston Evening Transcript.*

W. R. WHITNEY, '90; W. D. COOLIDGE, '96

(From an article, Copyright, 1923, by the Curtis Publishing Company.)

"When scientists came to realize the great waste of energy that attended the use of the carbon incandescent lamps, and proposed the use of tungsten filaments, all the experts laughed at the idea and declared that tungsten was forever a brittle element and could not be drawn into a flexible wire. They said it was fully as nonductile as chromium or silicon. But notwithstanding all this incredulity, and in the face of a mild skepticism even on the part of his associates, Dr. W. D. Coolidge finally succeeded in drawing tungsten wire, and the result of this single accomplishment has been the saving of hundreds of millions of dollars in the nation's lighting bill. . . . We have entered an age when investigation and production must walk hand in hand. In fact, much benefit would result if all our manufacturers were united with a great research laboratory. Then as Dr. Willis Whitney has said, 'The poorest furnace slag would be quickly tried for farm fertilizer, tested in cements, made into glass, ground into paint, calendared into writing paper, blown into thermal insulation, turned into asbestos, put into dynamite, or injected into medicines.'"

—*Floyd W. Parsons, in the Saturday Evening Post.*

GEORGE I. EMERSON, '09

George Irving Emerson, superintendent of the improved risk department of the National Fire Insurance Co., has been elected president of the National Fire Club. Mr. Emerson was born in New Hampshire and attended the Massachusetts Institute of Technology with the class of 1909. Later, he was engaged in engineering construction work for the Boston & Albany Railroad Co., and the New England Bureau of United Inspection. In 1914 he became special inspector and engineer of the New England Insurance Exchange, and in 1916 was appointed to the position he now holds, with the National Fire Insurance Co.

—*Hartford (Conn.) Courant.*

WITH THE UNDERGRADUATES

A "FALLING CLOSE" TO TECH NIGHT

A new Technology tradition was inaugurated on the night of Field Day when the audience at the Tech Night Musical Comedy marched en masse over the West Boston Bridge and along the Charles River Road to the baseball diamond between Building Two and Walker Memorial to engage in a four-sided class tug-of-war. The Seniors were victorious, the prize being the custody of a concrete beaver to remain in their possession until contested for again next year (or until abducted by some other class).

The idea of this is similar to a custom at Amherst where there is a statue of the "Goddess Sabrina" kept hidden in the possession of a carefully chosen secret committee from one of the classes. This class must exhibit the statue once a year at some public gathering such as a football game or prom, at which time other classes may attempt to capture the trophy by either legal or illegal means.

According to the rules governing the Technology contest, the winning class is allowed 24 hours in which to hide the mascot. After this time limit expires all other classes are at liberty to try to gain possession of it. Three men, whose names will be kept secret, are to be chosen from the winning class to become custodians of the Beaver. They must show it twice during the year before some organized gathering open to all students, such as the Technique Rush or the All-

Technology Smoker. Should they guard it safely for the twelve-month period, they must defend their title to it on the night of Field Day.

If a class graduates with the Beaver in its possession, it will automatically pass on to the class two years beneath it. Thus, in the present case, should 1924 retain possession until next June, they must turn over their charge to 1926. The Beaver may be hidden any place except where the other classes would have to employ criminal means to effect a capture. This rules out safe deposit vaults and storage warehouses.

The four-sided tug-of-war is conducted along the following lines. A 20-foot circle is drawn on the ground and it, and the space outside, is divided into four quadrants. Each class is assigned a quadrant and a rope, the ropes being attached to an iron ring. The class first pulling the ring outside the circle is the winner. The match is won by the first class winning two pulls.

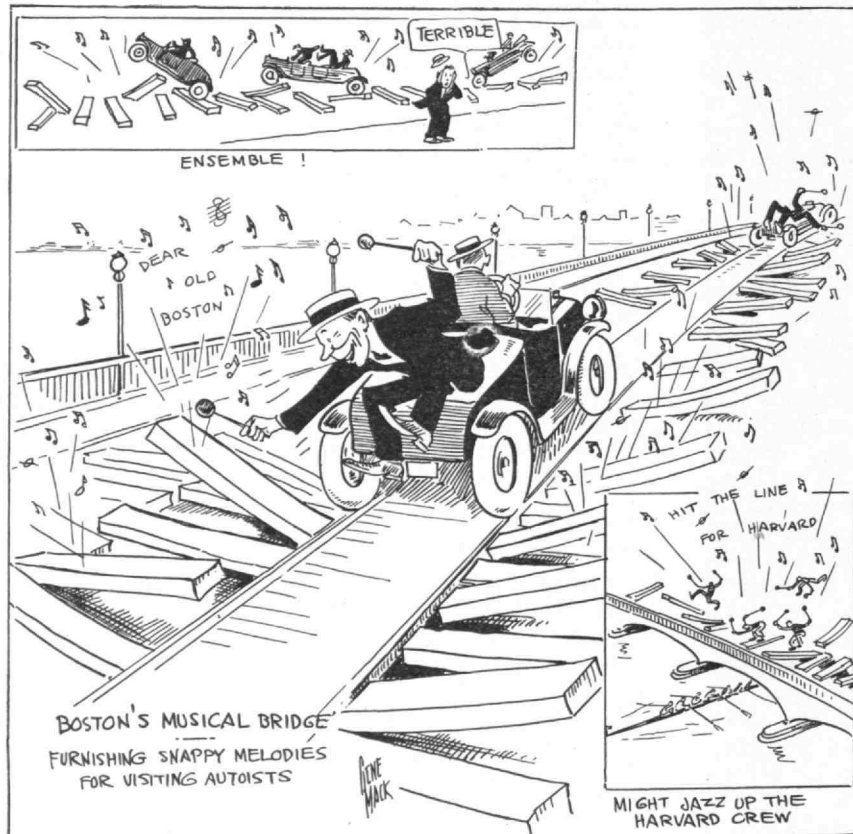
The Beaver is made of concrete from the plaster cast of a statue by Hugh Cairns which was used in the pageant at the dedication of the New Technology in 1916. It is about three feet high and weighs about 250 pounds.

THE GREATEST IS CHARITY

After a debate which had its genesis in the experiences of the past year, the Institute Committee in October decided to have one Combined Drive annually on behalf of charities, and no more. It was felt that while the undergraduates were willing and eager to contribute to worthy causes, they should not be subjected to continual solicitation in the corridors of the Institute, as for several years past, they have.

This year, therefore, the Institute Committee decided that the three worthy beneficiaries should be the Technology Christian Association, the Red Cross, and the Student Friendship Fund. The T. C. A., being a strictly local institution so far as its claims to support were concerned, was placed in a preferential position. Its officers computed their needs as \$2000 and accordingly it was announced that the first \$2000 raised was to be given to the T. C. A. Any remaining surplus was to be divided among the other two organizations.

The drive took place during the week of November 12. Total contributions were \$4413.93. Expenses of the drive amounted to \$160 and after deducting the \$2000 for the T. C. A., the Student Friendship Fund, (which is to go for the aid of needy European university students) received \$1443.22 and the Red Cross, \$810.71.



THE XYLOPHONE BRIDGE

A cartoonist of the Boston Post picks up the label which Technology students unaffectionately apply to their most used thoroughfare

ATHLETICS

CROSS-COUNTRY

Winning first and second places by wide margins, the varsity Cross-Country team administered to Cornell one of its most decisive defeats at Ithaca on October 27 over the four-mile course; 42 points to Cornell's 65. Last year's victory over Cornell was 50 to 55. With A. F. Fricker, '25, crossing the finish line 220 yards ahead of F. W. Bemis, '25, who secured second place, the best Coach Moakley's runners could do was take third when E. Kirby, intercollegiate champion for the mile, came in 150 yards behind Bemis.

Taking the lead from the beginning, Fricker stayed in front all of the way and finished the course in 20 minutes and 30 seconds, being $17\frac{1}{2}$ seconds faster time than that made by R. E. Hendrie, '23, last year's winner. Bemis was 31 seconds back of Fricker, and Kirby less than 9 seconds back of Bemis. Kirby was individual winner on November 10 of the "Big Four Run" in New York, between Dartmouth, Columbia, Cornell, and Penn, in which the teams placed in the order named. In that race he came from way behind in the final two miles and after a nip and tuck duel with A. W. Nazro of Dartmouth, forged to the front in the final stretch and won by six yards, breaking the course record by 38 seconds.

The other M. I. T. men scored as follows: 4—Rooney, '26, Time 21:22 3-5; 5—Parkinson, '25, 21:23; 7—Captain Holt, '24, 21:25; 11—Howe, '25, 21:53 1-5; Keplinger, 21:49 1-5.

In the Harvard meet on November 3, Fricker gained new laurels. Going out into the lead at the start he might have finished more than 75 yards in front of Byron Cutcheon, the Harvard two miler, save that he wandered off the course a hundred yards or so before getting his bearings. He was individual winner with the time of 27 minutes 31 seconds. Cutcheon came in second with Rooney, '26, a second behind, and Bemis, '25, six seconds after him. The feat of Duffy, '24, was the most striking. From a non-scoring position at Ithaca he rose to be the fourth scoring man for Technology with a time of only two seconds more than Chapin, Harvard's second man.

The order of finish of the Institute team was: 1—Fricker, '25, Time 27:31; 3—Rooney, '26, 27:47; 4—Bemis, '25, 27:53; 6—Duffy, '26, 27:58; 7—Captain Holt, '24, 28:8.

Last year the contest against Harvard was run as a triangular affair as a result of which Technology was a leader with 30 points, Dartmouth second with 48, and Harvard third with 50. This year's meet was also to have been triangular with Bowdoin as the third party, but this idea was given up, due to schedule shifts.

When Frank Bemis fell and was forced to drop out of the race at Princeton, November 10, 100 yards from the start, the team lost the chance of keeping the record clear for the season and was defeated by the score of 23-32 by the Princeton harriers over a five and one fourth-mile course. In 1922 Princeton won by 26 to 30.

With Bemis out of the run the tiger runners secured second, third, and fifth places, which were enough to give them the victory, even though Fricker again proved to be the outstanding Technology runner by leading the entire field to the finish line by a good 200 yards.

Duffy came in fourth place as the second Tech scorer and then three Princeton men finished, followed by a group of four M. I. T. men, Holt being third scoring man with eighth place. He was followed by Parkinson, Rooney and Keplinger, in order.

Bemis got off to a good start, but only 100 yards from the starting line, he tripped over a little bank of earth. The fall dazed him, but he got up and attempted to continue the race. After trying to jog along slowly for a short distance he was forced to drop out, as his knee bothered him and he was badly shaken up by his fall.

Duffy showed his real ability by coming in fourth place and counting as the second scoring M. I. T. man. His time was 29:55 and in covering the course in this time he beat out Conger, Gordan, and P. L. Leeming, veteran Princeton runners of last season. Leeming placed 16th and Conger 19th in the Intercollegiates last year.

Fricker's time was 28:51, or 18 seconds more than Captain Hendrie's time last year over the same course. Fricker was following closely behind Bemis when the latter fell and he barely missed falling over his teammate. After losing a little here he quickly set the pace and led the rest of the runners to the finish.

After Fricker crossed the finish line a winner, Leeming and J. K. Vodrey finished together almost a minute after Technology's leading performer. Only one second separated their times, Leeming running the course in 29:49 and Vodrey in 29:50. Duffy finished fourth, five seconds after the two Princeton men. He made a steady advance throughout the run; at the four mile mark he was 200 yards ahead of his Princeton opponents and he kept this advantage to the end.

Rooney finished in 10th place, behind Captain Holt and Parkinson, but hurt his leg on one of the hills of the course. Parkinson and Rooney came in close to-



Photo by C. M. Cornish

THAT CROSS-COUNTRY TEAM OF OURS

Front Row: Manager R. S. Wilson, Jr., John F. Duffy, W. L. Keplinger, Jr., Captain G. R. Holt, R. W. Parkinson and Dr. T. J. Connor, Coach.

Back Row: Gifford Symonds, J. F. Fricker, Lloyd Davidson and D. W. Howe.

gether, Rooney being three seconds behind.

Neither Bemis nor Rooney will be able to run for about ten days and their loss will markedly influence the Institute chances in the New England Championship held at Franklin Park, November 17. Until this time Technology was easily the favorite with the University of Maine coached by Frank Kanaly as the runner-up.

The advantage given by an outstanding performer is particularly evident in large intercollegiate runs where the number of contestants is so great that the medium good man who bears the brunt of winning dual meets is apt to be forced back to a high numbered position. Both may be in shape to run in the Four A meet on Monday, November 26, at Van Cortlandt Park.

SOCCER VICTORIES

With one game yet to play, Technology's exotic Soccer team has accomplished a season so far without defeat. Winning over Amherst, 2 to 0, on October 26, at Amherst, and over Clark by a score of 1 to 0 on the following day, the team held Dartmouth to a scoreless tie the following Saturday. The first home game on Saturday, November 10, at Tech Field, saw the defeat of the strong All-Chinese team by 3 to 0. The contest with Worcester Polytechnic Institute on November 17, at Tech Field, will complete the season.

The same lineup was used in the first three games: Lin, '26, China; Marques, '26, Uruguay; Ruiz, '25, New York; Santos, '24, Brazil; Lew, '24, China; Knight, '25, Massachusetts; Jones, '26, Pennsylvania; Shepard, '25, Massachusetts; Sun, '25, China; Young, '25, Uruguay; and Captain Dueval, '24, Washington. In the All-Chinese game Aass, '24, Norway, and Martinez, '26, Massachusetts, took the places of Lin and Lew.

The Amherst game was hardly under way when Santos, receiving the ball from Ruiz, booted it past the Amherst goal for the first tally. Throughout the game the Technology team was on the offensive, the ball rarely leaving the Amherst territory. In the Clark game, although tired by their victory of the day previous, they never gave their opponents a chance to score. Again, they played an offensive game, although missing a number of goals. The winning point was scored on a free kick following a Clark penalty.

The Dartmouth game was a different story. Both elevens were evenly matched and the ball seldom approached the net of either team until the final period. Then the Green penetrated the Technology defense and threatened to score on several occasions. Captain Dueval was the outstanding star of the game as his splendid guarding of the net prevented Dartmouth

ATHLETIC RESULTS TO NOVEMBER 15th

Cross-Country

- Oct. 27—M. I. T. 42, Cornell 65, at Ithaca.
 Nov. 3—M. I. T. 21, Harvard 35, at Cambridge.
 Harvard '27 15, M. I. T. '27 50, at Cambridge.
 Nov. 10—Princeton 23, M. I. T. 32, at Princeton.
 Worcester Academy 15, M. I. T. '27 45 at Worcester.

Soccer

- Oct. 26—M. I. T. 2, Amherst 0, at Amherst.
 Oct. 27—M. I. T. 1, Clark 0, at Worcester.
 Nov. 2—M. I. T. 0, Dartmouth 0, at Hanover.
 Nov. 10—M. I. T. 3, All-Chinese 0, at Cambridge.

Field Day

- Nov. 2—1926 10½, 1927 2½, at Tech Field.

The Calendar of Future Sports

- Nov. 17—Cross-Country, N. E. I. C. A. A. at Franklin Park, Boston.
 Nov. 17—Soccer, Worcester P. I. at Cambridge.
 Nov. 24—Fall Handicap Run at Franklin Park.
 Nov. 26—Cross-Country, I. C. A. A. A. at Van Cortlandt Park, N. Y.
 Dec. 7—Hockey, Boston University at the Arena, Boston.
 Jan. 5—Basket Ball, Northeastern University at Cambridge.
 Jan. 9—Basket Ball, Harvard at Harvard.
 Jan. 11—Wrestling, B. Y. M. C. U. at Cambridge.
 Jan. 12—Basket Ball, Brown at Providence.
 Jan. 17—Basket Ball, Tufts at Medford.
 Jan. 19—Basket Ball, Rhode Island State College at Cambridge.
 Jan. 19—Swimming, Lowell Textile at Lowell.
 Jan. 19—Wrestling, Yale at New Haven.

from scoring several times in the final minutes of the contests. In the All-Chinese game the home team was at no time in danger.

FIELD DAY

The Tech crew record for the mile course on the Charles River was twice broken November 3, in the course of the class races that formed one of the four contests in the annual Field Day between the sophomores and freshmen in which the 1926 teams were victorious, 10½ to 2½.

The sophomores won the crew race, tug-of-war and mile and a half relay race, but were able only to hold the freshmen to a 6 to 6 tie in the football game.

Three crew races were rowed, although only the race between the first crews of the two lower classes counted in the Field Day score. In the first race the senior boat soon pulled away from their junior rivals and crossed the finish line with four lengths of open water between the shells, making record time for the course of 5 minutes, 27

seconds, bettering the record hung up by the class crew of 1923 three years ago, by 11 4-5 seconds.

In the third race that gave the second year men three counters toward their victory, the record just made by the senior rowers was broken for the second time. A slight advantage for the sophomores was noted soon after the start, but the freshmen were up even at Harvard bridge, and started to pull away right afterward, but the sophs also hit up the pace and in a furious finish got a quarter-length lead. Their time was 5 minutes, 25 2-5 seconds, 1 3-5 seconds less than the senior time. The freshman time was but 4-5 of a second behind the time of the fourth-year boat.

The first pull of the tug-of-war contest resulted in a win for the second year forces in 1 minute and 9 seconds. Between the halves of the football game, they took the second heave in this event easily, but no less surely in 1 minute 43 2-5 seconds and the mile and a half relay contest was also held, 12 men running for each class. A missed pass on the fourth lap prevented the first year men from standing a chance to finish ahead, although they fought hard for the remaining laps and succeeded in reducing to 75 yards the lead of the sophomores.

The final score of the gridiron battle stood at 6-6. This meant that the five points for the winner of the football game were halved, giving the sophomores 10½, and the freshmen 2½.

The Class of 1926 thus earned the engraving of its numerals on the Field Day Cup. Last year, it was defeated, according to precedent seldom upset, by the then Sophomore Class of 1925.

NEWS FROM THE ALUMNI CLUBS

TECHNOLOGY CLUB OF NORTHERN OHIO

On Saturday afternoon, September 29, the Technology Club of Northern Ohio journeyed to Akron to enjoy a joint picnic with the Akron Technology Club, and to meet Orville B. Denison, our new Alumni Executive Secretary. The Northern Ohio delegation, consisting of about fifty loyal Techers, assembled at the Cleveland University Club, where automobiles were loaded and from where the start was made at about 2.00 p.m.

The concentration point in Akron was at the farm of P. W. Litchfield, '96, X, where greetings were exchanged and golf matches were arranged. The golfers were escorted to the course of the Portage Country Club, where many interesting contests were waged between the Akronites and our own followers of the Scotch art. Since each player had been permitted to name his own handicap and was not required to bring certified credentials from his own golf club, the Merryweather Golf Cup (presented by G. E. Merryweather, '96, II, and to be temporarily retained for a period of one year and permanently after three successive annual victories) will rest with the Akronites, though only for a year. Rumor has it that through oversight the Akron golfers overestimated the prowess of the Clevelanders and consequently made their handicaps so large that real skill could not defeat them. No doubt, there will be an impartial handicap committee appointed prior to the next competition or better it will be left entirely in the hands of the Cleveland contenders.

Meanwhile, the golf experts having been disposed of, two full baseball games were in progress. In this truly American sport there remained no doubt as to which club excelled, as two Cleveland victories resulted. There were many beautiful plays made—too many even, to mention—but suffice it to say that the victories were well earned.

As it grew dark, baseballers, golfers and ardent supporters once more embussed and made The Hudson Club—some twenty miles distant—their next objective. It seems that Dennie, George Merryweather, Carl Rowley and Ty Carlisle had miraculously discovered either jointly or individually that the Portage Club golf course had some very peculiar properties and one might say scientific as well. They discovered that all putting greens, driving tees and fairways had been marked off with radiolite or some similar material which glows at night and, with balls coated with the same material, they managed to get in an extra eighteen holes. If the truth be told, however, as the above report was from their own lips, with the aid of Hobe Ferris they played their extra full eighteen holes entirely on the nineteenth. At any rate, the evening was well gone when the radiolite golfers made their belated appearance at the Hudson Club. (Another rumor also was afoot that they had attempted to golf their way to Hudson from Akron and had given out of radiolite about half way, thus causing them to lose many balls.)

Flip Fleming, '16, II, Akron Club President, acted as host at dinner—and at a most sumptuous dinner. There were nearly one hundred seated at the table.

Immediately after dinner, everyone gathered in the large dance hall of the club and a forty-five minute vaudeville performance was witnessed. Dennie joined his talent with the performers and the combination was highly successful.

Finally came the real purpose of the meeting—hearing from Dennie. He was introduced by Flip Fleming and immediately launched into a detailed account of present conditions at the Institute. He then outlined his plan of action as Executive Secretary and his policy of bringing local alumni organizations outside of the Boston district into closer relations with the Institute. Dennie called for questions and most adequately answered them. Much interest was shown particularly as to future dormitory plans, as this was felt to be the great need of the Institute from the standpoint of Tech men not living in or near Boston.

There were many expressions of satisfaction upon the choice of Orville Denison as Executive Secretary, and every member of the Akron-Cleveland party announced their willingness to heartily cooperate with him in his plans.

The party came to a close at about 11.30 p.m. and the annual Akron-Cleveland picnic for 1923 went down in history as a most successful affair.

Philip N. Cristal, '17, *Secretary*,
Twelfth Floor, Marshall Bldg., Cleveland, Ohio.

TECHNOLOGY CLUB OF NEW YORK

Members of the Technology Club of New York, as well as alumni of M. I. T., will be pleased to learn that Mr. Kaludy Spalding, '89, has yielded to the requests of the officers of the Tech Club, and will take over the active management of the Technology Club of New York. Many of the alumni remember Mr. Spalding's activities and interest in the Tech Club of New York, from the old days when located on 28th Street, down to the present day; and the members of the Technology Club of New York are indeed fortunate to have the undivided services of a man who has the interest and welfare of the alumni and of the Tech club at heart.

Arrangements for dining room service have been made with the Players Club. Part of our basement space has been turned over to the Players Club, and they are now in the process of building a new kitchen. Upon completion of this work, we will receive twenty-four-hour service in our own club rooms. The meals are excellent and the prices moderate, and it is hoped that members will make use of the service. Accommodations for class luncheons and dinners are now available.

The season's entertainments open with a Hallowe'en Party on October 31. (Consult anyone who attended last year's party.) The Entertainment Committee has arranged an excellent program for the winter months and members will have the opportunity of hearing some very interesting speakers.

Robert J. Marlow, '17, *Secretary*,
17 Gramercy Park, New York, N. Y.

NEW HAVEN COUNTY TECHNOLOGY CLUB

Our new officers are as follows: President, Chester D. Dunlap; Vice President, Phillip G. Laurson; and Secretary-Treasurer, Herbert R. Polleys.

We have not yet started our regular meetings for the year but we are planning to when the Executive Secretary visits New Haven on November 16, 1923.

The last meeting was a joint affair with the Hartford Technology Club at Old Lyme, Connecticut, and was held in June. We played baseball, tennis, golf, etc., and had a splendid shore dinner at the Boxwood Manor. Some of the bravest took a dip in the sound, but for most of us the water was too cold. It makes an ideal place for this big outdoor meeting, as it has every facility for a good time. Everyone enjoyed himself and we are looking forward to next year's outing already. The baseball game is really the big event of the day, but New Haven unfortunately lost to Hartford by a score of $999x+y$ to $9999x+y3$.

The first luncheon of the year was held Thursday, October 18, at the Hotel Bishop, New Haven. Only about twelve Tech men came out, but as it was a very rainy day we are trying to blame it on the weather. Several subjects were discussed at the luncheon, among them being the Technology Club of New York City. We feel that if the club were located nearer Forty-second Street, many of us could drop in more often, but, as it is, very few from here ever stop there.

Herbert R. Polleys, '18, *Secretary*,
1523 Chapel Street, New Haven, Conn.

TECHNOLOGY CLUB OF SOUTHERN CALIFORNIA

A meeting of the Technology Club of Southern California was held in the University Club, on October 19, at which Mr. John C. Chase, '74, was the guest of honor. Mr. Chase is the official representative of the Technology Club of Southern California on the Alumni Council. His remarks at the luncheon gave a brief survey of the constituents and works of the Alumni Council. It is hardly necessary to say we were very much pleased to have Mr. Chase with us, and all who heard him enjoyed his remarks very much indeed.

Those present were: Paul E. Jeffers, '12, Charles T. Leeds, '06, John R. Brittain, '93, Frank H. Merrill, '93, Heath Scott Gerity, '10, Donald McReery, '22, Howell N. Tyson, '20, Walter Putnam, '02, Samuel Storrow, '90, James W. Johnson, '82, Charles P. Cooke, '95, George E. Lynch, '99, Herbert B. Perkins, '74, John O. Gaylord, '08, and Edward L. Mayberry, '06.

Edward L. Mayberry, '06, *Secretary pro tem*,
Los Angeles, Calif.

TECHNOLOGY CLUB OF PHILADELPHIA

The year opened with twenty-three Technology men present for the October meeting. Mr. W. J. Beatty, Foreign Sales Manager of the J. G. Brill Company, gave a very timely talk on Japan. The informal discussion which followed showed that the club was keenly interested in the history and customs of the Japanese people.

On November 7, Dr. John A. Miller of Swarthmore College will tell about the recent solar eclipse and will show pictures taken by the Swarthmore Expedition at Yerbanis, Mexico.

Through the efforts of C. A. Anderson, '05, who is President of the club for a second term and of James H. Brown, '02, Chairman of the Papers Committee, the meetings for this year promise to surpass even last year's interesting program.

Our regular dinner and meeting is held the first Wednesday of each month at the Engineers' Club. Every Thursday at 12.30 we have a club luncheon in Wanamaker's tea room. We are always glad to welcome any Technology man to these Philadelphia gatherings.

Walter J. Beadle, '17, *Secretary*,
Philadelphia Rapid Transit Company, Philadelphia, Pa.

TECHNOLOGY CLUB OF TAUNTON

The Technology Club of Taunton opened its season on the evening of October 22, with a well-attended smoker and general get-together meeting at the Taunton Inn Ballroom.

Twenty-seven members of the club with a few invited guests listened with a great deal of pleasure to Professor Miller who opened our eyes to the great changes and remarkable advances which have come to pass of late years in the Institute.

We all appreciated Professor Miller's kindness in coming down to visit us while we are yet in our infancy and trust that he came to no harm during his return trip in the hands of Mr. Denison.

Mr. Denison gave us an insight into the present day student life and activity and showed the inauguration moving pictures with the assistance of Professor Park and Mervin Bliss, '16, who presides over our Municipal Lighting Plant.

Our concerted drive on the older alumni brought forth good fruit and we look forward to a highly successful and enjoyable year. We have now a membership of thirty-seven and hope to make it fifty for the next meeting.

A. Loring Swasey, '98, was elected to act for us on the Alumni Council, and we feel sure that the Council will find our choice a wise one.

This club will deem it a privilege to be of service to any Tech man who may happen our way, and it looks forward with pleasure to an opportunity.

Clyde C. Mackenzie, '15, *Secretary*,
324 West Britannia Street, Taunton, Mass.

DETROIT TECHNOLOGY ASSOCIATION

Things look bright for a large year among the many Tech Alumni about Detroit. An enthusiastic luncheon, the first of the season, was held at the Army and Navy Grill Room recently, at which the following officers for the year were elected: President, Minot S. Dennett, 617 Book Bldg.; Vice President, Howard T. Graber, 1550 Atkinson Ave.; Secretary, Philip C. Baker, 768 Penobscot Bldg.; and Treasurer, Edw. M. Eliot, 228 Moss Ave.

The same general plan for the meetings, found so workable last year, will be followed again this year. A luncheon will be held every second Friday noon at the above grill room, and a bowling meet every fourth Friday night at 8.15. In fact, we have bowled at the Detroit Athletic Club, which provided unusually fine facilities, but owing to a change in their rules, we must seek a new alley, for no outside organizations can longer use their bowling alleys through some member's privilege. Detroit has gone wild on bowling. Every office, factory, shop and crowd has a bowling team, and every bowling alley in town has apparently been taken for the winter.

We will find some suitable place, however, and announce it later. Dr. Palmer, now of New York, will be sorely missed, for he had developed as good a bowling eye as he has one for the inspection of children.

Several new men have been reported to be in town, including the return of Don Williamson, '10, Eaton J. Clogher, '18, G. M. Rollason, '13, Ralph R. Smead, '10 and Frank B. Stevens, Jr., '18.

One of our old standbys, Oliver Davis, has left us to go to California, but we hope for not too long. William Kales has not yet reported to us about his recent trip through the Orient.

Roger Hill has been getting his picture in local golf magazines as a golfer.

Dr. Carl E. Buck returned from Bucksport, Maine. En route, he did some public speaking in Boston.

Philip C. Baker, '16, *Secretary*,
768 Penobscot Bldg., 1168 Edison Ave., Detroit, Michigan.

M. I. T. ASSOCIATION OF BALTIMORE

Our buffet smoker at the Rennert Hotel on the night of October 2 was not a howling success in the point of attendance, but in both purposefulness and novelty of the evening's program, was unsurpassed by any of our previous meetings.

Deep regret was felt by all present over the critical condition of the father of O. B. Denison, Executive Secretary, necessitating the latter's return home soon after his arrival here. He had come to Baltimore with the avowed intention of talking to and with our Association, but an urgent telegram from home encroached upon his mission and took him homeward before our meeting took place. Hope to have him with us again ere 1923 passes on.

O. B. was kind enough to leave us a movie reel for the evening of the meeting, and your Honorable Secretary officiated at a portable projector, by means of which scenes of last June were brought before us, depicting both the Senior parade from Trinity Church and the inaugural of President Stratton. The "old-timer's" were impressed with the background of the new Tech, while the young-uns for a moment waxed hilarious on the appearance of some of the cherished profs.

At this meeting, plans were discussed for Dr. Stratton's visit to us next December. To insure an attendance worthy of the man and the occasion, a joint meeting has been arranged with local branches of the national engineering societies. Let it be whispered, then, that, in the vernacular, we're going to put Tech over big in Baltimore.

Aaron Goodman, '18, *Secretary*,
2845 North Calvert Street, Baltimore, Md.

TECHNOLOGY CLUB OF THE MERRIMACK VALLEY

The annual meeting of the Technology Club of the Merrimack Valley was held on June 18, 1923, at the Vesper Country Club, with Dr. Samuel Stratton, President of M. I. T., Franklin W. Hobbs, President of the Arlington Mills in Lawrence, and Samuel C. Prescott, Professor at M. I. T., as the honored guests and principal speakers. More than forty men attended, representing classes as far back as 1893.

Club officers for the ensuing year were chosen as follows: President, John Ashton, Lawrence; Vice President, Dr. John H. Lambert, Lowell; Secretary and Treasurer, Austin D. Keables, Lowell; Executive Committee Member, William C. Ready, Lowell; and Representative to the Alumni Council, Charles H. Eames, Billerica.

On October 18, 1923, the club held an informal dinner at the Marlborough Hotel, the purpose of the occasion being to give the Lowell and Lawrence Tech Alumni an opportunity to meet Orville B. Denison, Executive Secretary of the Alumni Association. Seventeen Lawrence men were present. Mr. Denison spoke informally regarding his work and the changes that have taken place at the Institute. The speaker also showed a reel of motion pictures on the inauguration of Dr. Stratton as President of M. I. T. Mr. Denison was very much liked by all who met him or heard him.

Austin D. Keables, '09, *Secretary*,
14 Hoyt Avenue, Lowell, Mass.

WASHINGTON SOCIETY OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Below is a copy of a notice recently sent out to members of the Washington Society:

"The weekly luncheons on Friday at 12.30 p.m. at the University Club will be continued as usual. Make it a point to be present if you can. The aim is to promote good fellowship and to help you to get acquainted with Tech men in Washington.

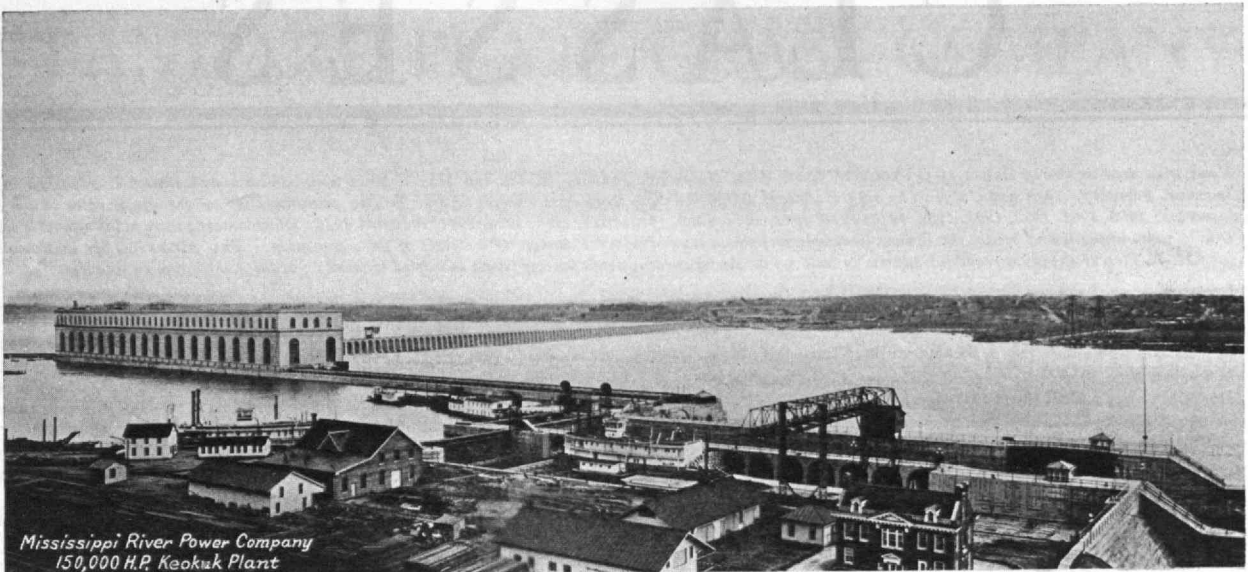
"The first luncheon will have a special program, with a speaker of prominence. Don't fail to come to this one, even if you cannot conveniently come every week.

"The luncheon on Friday, November 2, will be the first 'speaker' luncheon of the season. We have as the speaker, Mr. F. J. Bailey, Chairman of the Personnel Classification Board, who will tell us about 'The Classification of the Government Service.'

"President McDaniel has a plan for a liaison service with Technology, which he will tell us about.

"Be sure to come Friday, November 2. Sign the inclosed postcard now, so that we shall know how many to prepare for."

W. Malcolm Corse, '99, *Secretary*,
1701 Massachusetts Avenue, Washington, D. C.



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NEWS FROM THE CLASSES

News from even-numbered classes is published in issues dated November, January, March and May. News from odd-numbered classes is published in issues dated December, February, April and July. The only exceptions to this rule are those classes whose Secretaries have guaranteed the appearance of notes in every issue. These classes are: 1896, 1901, 1902, 1905, 1907, 1910, 1911, 1912, 1914, 1915, 1916, 1917, 1918, 1920, 1921, 1922 and 1923. Other classes adhere to the alternate schedule.

Due to strict limitation of space, the Review is unable to publish lists of address changes of members of the Association. The Alumni Office in Room 3-209, M. I. T., will supply a requested address or will act as the forwarding agent for any letters addressed to members of the Association in its care.

1873

ROBERT A. SHAILER, *Secretary*, 93 Church St., Winchester, Mass.

Our beloved Vice President, General Edmund Hayes, died at his home in Buffalo, N. Y., after a short illness. General Hayes has been Vice President of the Class of '73 since 1912. He was intensely interested in all class matters and in everything pertaining to the welfare of Technology.

1875

EDWARD A. W. HAMMATT, *Secretary*, South Orleans, Mass.

It is the usual story; few or none of the boys have been heard from during the summer.

Frank Dabney was expected to visit the East this summer, but so far as I have heard, he failed to come.

I have just learned that Jimmie Stanwood was in Boston a month or so ago, and met Hibbard, but whether he met any others of the class, I have not heard.

I was notified recently that the present address of Stanley P. Jewett is 128 South Second Street, Alhambra, Calif., that Wm. H. Shockley's is 4419 Finley Avenue, Los Angeles, Calif., and that Wm. R. Webster's is 3818 Chestnut Street, Philadelphia, Pa.

1881

FRANK H. BRIGGS, *Secretary*, Hotel Puritan, Boston, Mass.

Ned Warren writes under date of June 25 as follows:

"I have read with interest the class notes in the Review, and was mighty sorry to see that Jim Lund and Bill Lindsay had passed away, and just a few days ago I saw the notice of Parker's death in the *Transcript*. Truly the boys have taken to slipping away altogether too fast to suit me.

"I think that when I last wrote I was expecting to spend the summer of 1922 in the Yellowstone studying the beaver, in continuation of my work of 1921. Unfortunately, this plan fell through because of the inability of those in charge to finance it; therefore my family and I spent the summer at Longs Peak Inn, in Estes Park. This place was conducted by Enos Mills, the well known nature writer, who died last September, shortly after we had left there. I was able to continue studies on beaver work in that region, finding much of interest. As Mills wrote much concerning the beaver work in that region I found it profitable to go over the same ground and note the changes which had taken place. I have written a report on these studies which will be published, I hope quite soon, by the Roosevelt Wild Life Forest Experiment Station, New York State College of Forestry, under whose auspices I did the work in the Yellowstone.

"We expected to go to Longs Peak Inn for the month of June, at least, this year, when quite unexpectedly the chance came for me to go to the Yellowstone for the above-mentioned Institution, and of course I took it up. So my wife and little girl went to New England to spend the summer, and I am expecting to start from here about the first of July. A young man, James Mills, of Orange, N. J., is to be my assistant, and is coming here, and then we drive through in my car.

"I have led my usual rather quiet existence doing various and sundry things of no great importance. I was not altogether in my usual health, and finally early in May my tonsils were removed, and I trust that I will be all right once more. I am certainly feeling much better now."

Harry Stearns had a stroke some time ago and has not been in first-class condition since.

Frank Came has retired to "Canaan Farm" at Richelieu, Province of Quebec, where he is a breeder of Pure Bred Holstein Cattle, Clydesdale and Hackney Horses and Hampshire Sheep. His letterheads read: "Unto a good land and a large: unto a land flowing with milk and honey: unto the place of Canaan."

1885

I. W. LITCHFIELD, *Secretary*, 10 Kenmore St., Boston, Mass.

No notes received from the Secretary.

1887

EDWARD G. THOMAS, *Secretary*, Toledo Scale Co., Toledo, Ohio.

No notes received from the Secretary.

1889

WALTER H. KILHAM, *Secretary*, 9 Park St., Boston, Mass.

The Secretary has the following from E. V. Shepard, whose profession is not exactly one which is taught at the M. I. T., though it is easy to see how Tech training would fit in well.

"It is always a pleasure to hear from you and I will try to tell you what I am doing. Just read the enclosed 'Publishers' Note' to see how it all came about, and who is associated with me. I have taken rather a fine old house in a most exclusive district and fitted it up to teach Auction, Mah-Jongg, or any other game in popular vogue.

"On the final page of enclosed booklet you will find the names of our Faculty and Honorary Advisory Board. To the latter, we hope to add Harry Ward of Boston. These men are our greatest authorities on the game. By bringing them together to pass on all dubious questions, we aim to standardize every feature of the game.

"We teach personally, by mail, deliver lectures, and run public games. I am now signed up to write for each issue of *The American Golfer*, to broadcast for Station WEAF after October 1, run syndicate articles in newspapers, etc. I am busy. I guess I am putting the B in busy. Aside from these things I have regular lessons to give, both clients and teachers.

"I think that you will begin to hear about Shepard's Studio, Inc."

Orook was married on October 20 to Miss Elene Ellsworth at Taylor Chapel, New York City. They will be at home after November 1 at 114 East Fortieth Street, New York. Many congratulations. The Secretary doesn't have many marriages to record of late years. Incidentally, it ought to be said that '89 has no more loyal enthusiastic or distinguished member than Orook.

Billy Merrill died on September 17. His work was so well known to all engineers and manufacturers that an extended notice here is not needed, but his constructive accomplishments were so great that he did in one lifetime more than many others would be able to do in two. The *Chicago Journal of Commerce* gave the following account of his life:

"William Henry Merrill, founder, President of Underwriters' Laboratories, Inc., died yesterday morning at the Presbyterian Hospital of Chicago. Born in Warsaw, New York, December 29, 1868, Mr. Merrill graduated from the Massachusetts Institute of Technology in 1889 and shortly thereafter reported in Chicago for service in fire protection and prevention, to which cause his very active career of a third of a century was exclusively devoted.

"In 1898, he organized the work now known the world over as Underwriters' Laboratories and has since served as its principal executive. The institution, both as to its plant and its equipment and its influence in the building and manufacturing industries, becomes an enduring monument to his talent as an organizer and executive and as a crusader in a public work of major importance.

"He was a principal factor in bringing together the various interests which adopted and sponsored the first edition of the National Electrical Code and thereafter he worked effectively to secure its recognition and enforcement in Chicago and other cities of the Central West. He served, in turn, as Secretary-Treasurer and as President of the National Fire Protection Association.

"His constructive influence in the work of that body was after recognized by election to honorary membership. Because of his pioneer interests in securing reasonable safeguards for acetylene gas generating equipment, he was likewise selected for honorary membership in the Compressed Gas Association.

"In 1918, he was drafted for war service at one dollar per year, serving as chairman, Fire Prevention Section, War Industries Board.

"Mr. Merrill was a member of the Mid-Day and University Clubs of Chicago and of the Sigma Chi College fraternity. He is survived by a widow and five children of a former marriage.

"The absence from Chicago of a number of the western managers of companies, attending the annual meeting of the Western Insurance Union at Montreal, and the Casualty convention at French Lick Springs, Ind., prevented the calling of special meetings of the various representative organizations with which Mr. Merrill had come in contact during his activities with the Underwriters' Laboratories, to render any official recognition of his death yesterday.

"It is understood, however, that resolutions will be adopted by the various associations, expressing the regret at the passing of so able and important a figure in the fire protection and prevention world. Mr. Merrill had a host

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CAMBRIDGE

1889 Continued

of friends among the leading insurance men of this country, and yesterday many of his friends expressed sincere regrets at his untimely death.

"As the result of Mr. Merrill's death, it is probable that the affairs of the Underwriters' Laboratories will be left in the hands of Vice President A. R. Small."

1891

HENRY A. FISKE, *Secretary*, c/o Grinnell Co., 260 West Exchange St., Providence, R. I.

A few members of the class attended an outing at the Vesper Country Club, Lowell, Mass., on Tuesday, June 19. The following were present: Boyd, Capen, Colburn, Dana, Earle, Fiske, Forbes, Rogers and Palmer.

We were the guests of Homer Goodwin, who has a camp bungalow on the club grounds. This club is located on an island in the Merrimac River and is somewhat unique in having a number of small wooden houses on the river bank which are rented to members.

Most of us motored from Boston, arriving in time for lunch, which was served in the locker building. The main clubhouse burned a short time ago and a fine brick clubhouse is in prospect.

After lunch, most of us played golf. There is a good eighteen-hole course, part on the island and part on the mainland. One plays across the river twice. Fine for the golf ball business.

It was a scorching hot day, about 95° in the shade. Good for a fat man if he survives. The less said about golf scores the better.

Mr. and Mrs. Goodwin served liquid refreshments at their bungalow, which was located near the 18th tee. This was a life saver for at least one of the party.

Dinner was served in the temporary clubhouse and then we motored back in the cool of the evening.

1893

FREDERIC H. FAY, *Secretary*, 200 Devonshire St., Boston, 9, Mass.

GEORGE B. GLIDDEN, *Assistant Secretary*, P. O. Box 1604, Boston, Mass.

The *Boston Evening Transcript* recently published an illustrated article on the "First Unit of a Great New Group of Technology Dormitories," showing a perspective of the group as it will appear when completed. The first unit will be known as the "Class of '93 Dormitory."

The type of construction being used is one developed by the Housing Company, of which A. F. Bemis, '93, is President. This method of construction is being observed with great interest by engineers, architects and builders in this vicinity.

At the fall meeting of the Corporation of the Institute, Henry Morss, '93, was made a member of the new visiting committee to the Department of Military Science and Tactics.

Among the laymen lecturers of the Old South Church in Boston for the winter season, are A. F. Bemis, '93, who will give an illustrated lecture on January 11 on "India"; and Professor C. M. Spofford, '93, who will speak on January 25 on "The Care of Young Men in Our Educational Institutions."

Burt L. Fenner, '93, long a member of the firm of McKim, Mead & White, has been Chairman of the apprenticeship commission of the New York Building Congress since its organization in August, 1922.

W. H. Graves, '93, has been Secretary and Treasurer of the Boston Commission on apprenticeship since 1922.

John Sturgis Codman, '93, electrical engineer, manufacturer, publicist and singer, has published a book containing, among other things, a discussion of the single tax and the effect it would have upon revenue returns, entitled "Unemployment and our Revenue Problem."

The Secretary has received announcement of the marriage of Mrs. May Catherine Strasburg to Harold A. Richnomd, '93, on July 21, 1923, at Buffalo, N. Y.

Bemis has just received a souvenir post card from Maki, on one side showing the result of the recent earthquake and fire (looking much like San Francisco) and on the other reading as follows:

"No more of Guiza Street! In the course of a few years wish you to come and see a newly built street here.

"All of my family safe and a slight damage done to my real estate."

1895

FRANK A. BOURNE, *Secretary*, 177 State St., Boston, Mass.

The annual outing was held this year on June 15, 16, and 17, at the Riversea Club, Saybrook, Conn., as usual. The attendance was not as large as last year (Alden, Booth, Swope, both Clapps, Moore, and Hannah were there), but lacked none of the enthusiasm that has marked all the previous outings. This year those of the Class of '02 held their outing with us, and proved to be congenial spirits. Many letters of regret were received from members who couldn't be with us. Stowell and Zapf sent a box of "Sunkist" oranges, which kept us liberally supplied with the delicious fruit. Everybody took a turn at golf, but Booth and the Clapps were the real fans. Alden and Hannah took their morning dip in the Sound. The weather was perfect. Tentative plans for a real party in 1925 were discussed. We have made arrangements for June 13, 14, and 15, next year.

F. W. Draper, of the Russo-Asiatic Consolidated, Ltd., Pinners Hall, Austin Friars, London, is in New York in the interests of that company. He is making his headquarters with Knox & Allen, 160 Broadway. (From the *Engineering and Mining Journal-Press* of June 16, 1923.)

F. E. Matthes writes: "As you see, I am still in my old haunts, pursuing the ancient glaciers of the Sierra Nevada. I am now working south of the Yosemite, in the canyon of the San Joaquin River. Have just had a harum-scarum trip over the divide, taking the pack train over snowdrifts six to ten feet high. But it is wonderful weather at these altitudes (about 7000 feet) and a fellow feels full of pep all day long. Get up about 5.30 a.m.; breakfast at 6.00 a.m. Get out on horseback by 7.00 a.m. and come in for supper about 6.30 p.m. To bed about 9.00 p.m.

"It is rather doubtful whether I shall be in Boston this year, but, if I am, I certainly shall drop in to see you. Give my regards to the other '95 men in your surroundings. I see few of them out in these parts."

The pleasure of being Secretary of the class is augmented, or it might be better to say the misery is decreased, by an occasional bit of spice like the following letter from J. E. Lonugrew dated July 5, 1923 from Tantanagar, in far-away India: "Enclosed you will please find check for two dollars to cover '23 class dues.

"I have good news today. I came here to build the first wire mill in India. The deed is done, and I am flying the homeward pennant. A general summary of the mill condition is as follows:

"The mill is built. Indians have been trained to do the work. What they need now is more practice, which they have to get themselves. Our wire drawings cost for the month of May was less than the selling price. Our first order for the Government of India has been accepted by their inspectors. They work overtime in the mill to fill orders, which include some for the Government.

"It has been a wonderful experience, but I am glad it is over with.

"We are coming home via the Pacific. This will complete the circle around the globe. We could go direct from Calcutta to Hongkong, but my wife wants to see Colombo, Ceylon. Colombo is therefore the first stop. The French mail steamer takes us from Colombo to Hongkong and the American line from there to San Francisco.

"Messrs. Perrin and Marshall, Consulting Engineers, 1107 Broadway, New York, will have my address while I am travelling. I shall give you a more permanent address when I get home and find out where I can drop anchor."

The Secretary, himself, is qualified as an expert French chauffeur, and his pink card was accepted in Spain and Italy, where he was lost for two or three months last summer. France is a "pays des clous," and the way some tires would pick up nails was a caution. Four months of outdoors, with good food, from Swedish bread and butter, and jordgubbers to Italian macaroni, with enough sketching, photography, and an architects' and town planners' convention for active interest made one feel that this was a red letter year.

1895 Continued

That, with the fact that he found his former office building a pile of bricks, has necessitated a new start at a new address.

Previous officers of the class are often helpful, and I found this note from Brackett: "Richard Morey of St. Louis, Class of '95, has been in town for a few days with his son who is entering Harvard this year. I had the pleasure of taking him to the Council Meeting at the Walker Memorial Monday night, and yesterday, we had a little lunch at the City Club, at which Rourke, Barrows, Tucker and Fuller were present, all members of the class in Civil Engineering, which was the course that Morey took."

"Mr. Morey has been in St. Louis for many years and has done some large engineering work. He has done a good deal of work for the Southern Pacific and Santa Fe Railroads. During the War, he had a shipyard in one of the Southern States and built wooden ships for the Government."

The Secretary would have been better off at that lunch, for at that time he was meeting mountainous head seas.

1896

CHARLES E. LOCKE, *Secretary*, M. I. T., Cambridge, Mass.

J. ARNOLD ROCKWELL, *Assistant Secretary*, 24 Garden St., Cambridge, Mass.

The grist of class news is rather small for this issue and is still further lessened by the fact that one opportunity for securing good items was lost when Walter Leland called at the Secretary's office on October fourth and left his card. This failure to make personal contact was a great disappointment, because the Secretary would not only have enjoyed seeing Leland again after an interim of eight years, but would have undoubtedly been able to extract from him a number of items regarding the fellows in and around San Francisco, where Leland has been located since he left Technology a decade or more ago.

Classmates will learn with keen regret of the loss suffered by Charlie Hyde in the Berkeley fire. Unfortunately, his splendid house was in the path of the grass fire as it came sweeping over the hills from North Berkeley and was one of the first to go. The only information received so far has come indirectly and indicates that Charlie and his family escaped unharmed, but suffered entire loss of house and contents. Personal word is anxiously waited from Charlie to tell the story of the event and how he is staging his "come back." It hardly seems necessary to add that the sympathy of all classmates goes out to Charlie in his loss.

The Secretary recently had a very pleasant call from the widow of J. Porter Palmer, who passed away over a year ago. Mrs. Palmer has moved back to Brookline for the education of the two children and to secure work where she is known. Before her marriage she had Radcliffe training and practical experience in secretarial duties, cataloguing, filing, proof reading, etc., for her father, who was a prominent Boston historian, and for others. This work she is now undertaking to resume and she is available for anyone desiring temporary or permanent secretarial service.

The Secretary hesitates to mention Lythgoe and Hultman because it seems as if they receive more publicity than any other '96 men. The latest from Lythgoe is a report that, as Director of the State Department of Health, he analyzed in September, 563 samples of beverages, of which 485 contained more than one-half of one per cent. of alcohol and 132 were beer samples averaging 4.7 per cent. alcohol. In some samples the alcoholic content ran as high as 90 per cent. No mention is made in the report as to what disposition was given to the residue after analysis.

Hultman started two things in Massachusetts. One was a gasoline investigation, which seemed to bear fruit very quickly in the form of a sudden drop of three cents per gallon. He demonstrated that there was a big discrepancy in the price of gasoline in Massachusetts and elsewhere, the price being greatly to the disadvantage of Massachusetts. His latest investigation is that of coal, to determine whether the Boston dealers are not making too much profit and are taking advantage of the present conditions to raise the price of coal unnecessarily.

Steve Gage attended the Sanitary Engineers' Convention in the old Rogers Building in Boston and took occasion to discuss the report of the committee on bathing places, and dealt with the use of chlorine for disinfecting the swimming pools, the removing of turbidity from the water, the regulation of temperature, and the control of bacteria. It is apparently a far cry from the modern swimming pool back to the old swimming hole which we kids thrived on and which was used over and over and was well supplied with bacteria and mud. Gage believes that for every twenty persons using a swimming pool, there should be one thousand gallons of new water added and there should not be more than ten persons in the water at one time for each one thousand gallons in the pool.

1897

CHARLES W. BRADLEE, *Acting Secretary*, 53 State St., Boston, Mass.

H. M. Haven & A. T. Hopkins, Inc., are appraising the Amoskeag Mills at Manchester, N. H., also six textile mills at Fall River, and, in addition, have put through three important pieces of financing recently.

Hugh K. Moore's daughter, Katherine, and Arthur T. Hopkins' daughter, Eleanor, have entered Wellesley together.

Edgar M. Hawkins' son, Richard, is attending the Institute and living in the Dormitories.

1899

W. MALCOLM CORSE, *Secretary*, 1701 Massachusetts Ave., Washington, D. C.

BENJAMIN S. HINCKLEY, *Assistant Secretary*, 112 Water St., Boston, Mass.

The Secretary sent out to all members of the class some literature on Martha's Vineyard and Saybrook, Connecticut, the two places suggested for our Twenty-fifth Reunion. The vote indicates about two to one in favor of Martha's Vineyard. The exact address will therefore be Wesley House, Oak Bluffs, Massachusetts. The Wesley House is on Martha's Vineyard Island. Its owner, Mr. Herbert M. Chase, of Boston, has promised to see that we have a wonderful time. The Annex will be reserved for men only; the main part of the hotel for men with their wives and children. Don't forget that our last reunion demonstrated fully the fact that the ladies added much to the pleasure of the party. The dates are June 14 to 17, inclusive.

Plans for a class book are under consideration. Arthur L. Hamilton, our Class President, will be on the job, and this assures us of a good time listening to some of his Alaskan experiences.

The Secretary saw Harry White and Tom Robinson this summer. They assure us that the architects will be represented.

Miles Sherrill had a fine summer in France. He and his wife thoroughly enjoyed both France and England.

Norman Rood has returned to his old love for saddle horses. He is Vice President of the Vicmead Hunt Club, of Wilmington, Delaware, and was Chairman of their Field Day Committee this fall. He has a string of five fine saddle horses. He can ride, as well as talk, horses. Mrs. Rood is also an enthusiastic horsewoman.

Henry C. Eaton, of Waltham, has accepted a position as plant engineer at the American Optical Company, Southbridge. He was formerly work engineer for the Waltham Watch Company. He figured prominently in the city life of Waltham.

Word has come of the death of Harold Osgood Ayer at his home in Pasadena, California, on July 15. Mr. Ayer had suffered severely at times during the past several years from a disease that baffled the best medical skill. During a sojourn with his family in Europe this summer, Mr. Ayer developed such alarming symptoms that it was necessary to hasten home. The journey from New York had to be made under the care of a doctor and a nurse. He lived to experience the happiness of being in his own home again, and was conscious almost until the end, which came quietly and peacefully.

Harold Ayer was the son of Mr. and Mrs. James McMillan Ayer. He was born in Buenos Aires on July 9, 1877. His parents moved to Boston when he was eight years old, and there he received his education. He was married to Harriet Pillsbury at Minneapolis, on April 23, 1902. He and his wife lived for a number of years at Savannah, Georgia, where Mr. Ayer was connected with the Southern Cotton Oil Company. They were obliged to move West because of his wife's health, and after a brief residence in Colorado, made their home in Pasadena ten years ago.

Mr. Ayer, since 1913, had had a large interest in the R. W. Pridham Company, manufacturers of Los Angeles.

Mr. Ayer was a singularly beloved citizen of Pasadena. He had a large family of friends, bound to him by unusual bonds of sympathy and affection. He was a man of most engaging personality and of rare unselfishness and devotion to the happiness and welfare of others. His social connections were wide.

He is survived by a widow and two daughters, the Misses Alice and Anne Ayer.

1901

ALLAN WINTER ROWE, *Secretary*, 295 Commonwealth Ave., Boston, Mass.

As the first number of the Review for the current year has not appeared as these words are written, your Secretary is in ignorance of the editorial response to his modest protest voiced in the last set of notes sent in. I hope, however, that the justice of his claim will be recognized and that the class will be spared the pain of further undue discrimination against their representative.

Reports have come in from a number of the men, many of which are truly informative. The following is cited at length from Ellis Lawrence's statement which the writer was very glad indeed to receive. Ellis is still conducting his professional activity and is also Dean of the School of Architecture at the University of Oregon.

"Besides helping to run the office, I am spending my time directing an interesting experiment in Art education—a school in which are Departments of Architecture (Design and Structural), Painting, Sculpturing and the Crafts. Being architect for the University work—we secure the coöperation of all three branches of work—using students whenever possible. For example, the entrance to the Art Building was designed under direction of architect students. Eleven panels of stained glass were done by art and craft students. A bas-relief executed by six sculptors (students) was incorporated in the work, tile inserts were executed by craft students and a small decoration is now being done for the ceiling of the lobby, and designs are being made for the tile floor of the lobby. Such a close affiliation is valuable and the results are very promising.

"Am also serving as Executive of the Oregon Association of Building and Construction—which counts among its membership all branches of the industry. An Honorary Guild of Handicrafts has been organized, and mechanics, the pick of them, are honored by the entire industry. On this, Secretary Hoover sends this telegram: 'Their children are recognized by the State, which is training them as approved teachers of apprentices.' The



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New York
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Company, Dayton, Ohio
Westbrook Apartments, Buffalo, New York
655 Park Avenue, New York

Alfred Alschuler, Architect
Frank L. Packard, Architect
J. E. R. Carpenter, Architect
S. D. Kelly, Architect

Geo. H. Wells, Architect

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{ J. E. R. Carpenter } Associate
{ Mott B. Schmidt } Architects

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1901 Continued

association is carrying on such work as a seasonal employment survey, etc. I have recently resigned from the City Planning Commission because of pressure of work.

"In the American Institute of Architects I am serving on the Jury of Fellows, the Educational Committee, and the Committee on Industrial Relationship."

Ellis also writes that Holford's deep-rooted modesty prevents him making a personal report but that he, too, is actively engaged professionally and is also doing fine work in the Civic Betterment movement.

A. K. Trenholme is also in Portland and rumor has it that he has developed into a "golfer" of real significance.

Fred Clapp has been acting as an expert for the Government in the Teapot-Dome investigation. To those of us who remember his gentle ways as a student, his embroilment in the present controversy is most interesting. That he has added truculency to his other excellent qualities, his present employment leaves no room for doubt.

Henry Marcus, after a length of silence, answers in word that he is employed as a refrigeration engineer in San Francisco. He mentions pathetically that he is growing older each year. To those of us who remember his ebullient personality this seems hardly possible, but there is a biological authority for the statement.

Solon Stone writes from Buffalo at some length and most interestingly. Solon suggests that the '01 group in Buffalo are profoundly interested in rowing at the Institute and are desirous of assisting it. These are glad words. Solon is with the Cowper Company in the Fidelity Building—I hope this name is prophetic. He adds the pithy and trenchant phrase which may well be offered for your attention; "Cuss a mechanic and the bankruptcy guys get you," and that's not the half of it, dearie. Solon is also President of the Technology Club of Buffalo and in the roll of members are some well remembered names. Buffalo is coming through 100% strong for the Twenty-fifth Reunion. Western papers please copy.

Louis Henrich is with Coolidge and Carlson.—Austin Hyde is still with Walter Baker Company.—Bob Derby is in New York with the Niles, Bement, Pond Company.—Bob Montgomery is one of the few Technology men who is directly utilizing his Technology training in the conduct of his vocation. Having plucked daisies—not in the scriptural sense—for four busy and happy years, Monty is now raising roses (this is not a euphemism but an exact statement) in Hadley, Massachusetts.

Phil Moore, writing earlier in the summer, gave promise of passing through Boston, but up to this time nothing has happened. The following is an excerpt from a pleasant note from E. F. Church who is at the Polytechnic Institute in Brooklyn.

"I have no particular news to give you; I am still in the business of teaching future engineers (real and would-be), at the Polytechnic Institute. I have run across a few of our old class; 'Corporal' at the New York Navy Yard, who is doing splendidly; Webster, Editor of Marine Engineering; Carl Rossmassler, Professor of Machine Design at Cooper Institute (he was married a year ago). I used to see C. F. Willard, and Harry White, but it is a good many years now since I last saw them."

Nat Patch also writes from Buffalo, where he is Secretary and Works Manager of the Lumen Bearing Company. He offers a query which I hand on verbatim. "Why do '01 men never stop off in Buffalo? Our local Technology Club would be glad to see them and the four or five men of our class would be glad to make special efforts to make their stay pleasant and interesting. The Tech Club of Buffalo has luncheon at a special table each Friday noon at 12.30. Come and renew old contacts."

From the quality of the communications which I have recently received from Buffalo, I think that any '01 man who does not stop off and effect a reunion with the '01 group, is making a serious mistake.

A large number of changes of address of members of the class have been received by your Secretary from the Alumni Office. These will be verified and will appear in the next number. In the meantime, send in any news that you have of the doings of yourself and the other members of the class.

1902

FREDERICK H. HUNTER, *Secretary*, Box 11, West Roxbury, Mass.

BURTON G. PHILBRICK, *Assistant Secretary*, 276 Stuart St., Boston, Mass.

Jimmie Taylor, who is Division Engineer for the Pennsylvania Railroad, has been transferred from Columbus to Cleveland, Ohio, his address there being 5716 Euclid Avenue.—Paul Weeks is at the Government Proving Grounds, Aberdeen, Maryland.—Wade Wetmore is reported at 1732 Broadway, Alameda, California.—Irvine D. Waterman, from whom we have not heard for a long time, is located in New Haven, Conn., his address being 101 Hubinger Street.—Frank Hill Smith's address is 14 East Second Street, Dayton, Ohio.—William N. Brown has moved to 1496 Highland Avenue, Lakewood, Ohio.—Earl Crane is engaged in mining at Pateros, Washington.—Durgin's address is 2935 Macomb Street, Washington, D. C., where he is living while he is still helping Mr. Hoover run the Department of Commerce.—Arthur More is with the Selden Truck Corporation, Rochester, N. Y.

The New York bunch reports a very successful Ladies' Night held at the Travers Island Clubhouse of the New York Athletic Club on Saturday, September 15. Fred Mathesius was in charge of the arrangements. Dancing was enjoyed until a late hour. Those present were Mr. and Mrs. Frank Montgomery, Mr. and Mrs. Joe Philbrick, Mr. and Mrs. Robert Baldwin, Mr. and Mrs. Lester Hammond, Mr. and Mrs. Fred Mathesius, and Mr. and Mrs. Herbert Hathaway. The Gothamites are planning to have another

affair for the ladies later in the season. Bob Baldwin will be in charge and will conduct the party to Greenwich Village.

A class dinner in Boston will be held early in December. Any classmate near Boston, who has not received word of this affair by the time he gets this issue of the Review, should communicate with the Class Secretary. Any classmate from a distance, expecting to be in Boston early in December, should notify the Class Secretary who will send particulars.

Has any one heard from George B. O'Beir? The Institute office thinks he was last located at Colby College, Waterville, Maine. The Class Secretary thinks he was last heard from at the Case School of Applied Science, Cleveland, Ohio, but neither address seems to be any good.

1903

CHESTER S. ALDRICH, *Secretary*, 10 Beaufort Road, Jamaica Plain, Mass.

GILBERT H. GLEASON, *Assistant Secretary*, 25 Huntington Ave., Boston, Mass.

After the news for the last issue of the Review had gone to press a letter arrived from Walter Adams, 924 Cypress Avenue, Burbank, Calif., telling of a 1903 Pacific Coast Reunion held on June 9 while we were at Wianno. As you will all be glad to hear this report, it is reproduced in full below.

"I received Stiles' letter with the names of '03 men in the West. It arrived shortly after the first of June. It did not give me much chance to get the men together, but I did the best I could.

"I phoned all those around Los Angeles who had phones and wrote a note to the others.

"George MacDonald arranged the dinner at a cafe in Los Angeles.

"We met about 6.30 p.m. on Saturday, June 9, at Paulais Cafe.

"There were present the following: W. H. Adams, G. H. Clapp, R. R. Newman, G. M. MacDonald, A. E. Place, and F. D. Rathbun.

"We had a good dinner and then spent the evening in our private room at the cafe. Each one present outlined his work since he left Tech.

"Adams had travelled the most and seen most of the world. Place had spent most of his time in Mexico, where he had made and lost money in addition to seeing many interesting and exciting times. Newman and Adams both had commissions in the Army during the War. The others had tried to get in but lost out for various reasons. In most cases the work they were doing was considered more important than being in the Army. MacDonald was making ammunition while Rathbun was making copper.

"A day or two before the dinner I had a letter from Myron Clark saying he would be in Los Angeles about the day of the dinner. I went around to his hotel that night and found him, but was too late to get him to the dinner. He already had received three invitations for that night. He seems to be some popular globe trotter.

"It was decided to send a telegram to the bunch at the reunion. No one had brought any notice giving the address so I was delegated to send a telegram the next day. Upon investigation I found that your reunion broke up on Sunday and after allowing for the difference in time I could not get the telegram to you in time so did not send it."

Arthur S. Martin, '03, died at Sharon, on April 5, 1923, of tuberculosis contracted in Oriente Cayo Mambi, Cuba, where he was Assistant Chief Engineer for the Atlantic Fruit Co., and West India Finance Corporation. He leaves a widow and a little daughter.

Warren E. Sumner, Course X, died at East Walpole, Mass., on March 12, 1923. He had been employed continuously, since his graduation, with F. W. Bird & Son, manufacturers of paper and roofing at East Walpole, Mass. A comprehensive article in the *Newponset Review* by Mr. Wyman, their manufacturing manager, is an eloquent testimonial to his fidelity, industry and good citizenship, and we are taking the liberty of quoting it as follows:

"Warren E. Sumner entered the employ of Bird & Son, on August 3, 1903, soon after graduating from the Massachusetts Institute of Technology. He was our first full-time chemist and since that time has directed the development of our laboratory and products. During this long period he has worked, principally with and under the direction of our President, Mr. Charles S. Bird.

"Mr. Sumner was, in his quiet way, an important member of many of our Committees—Benefit Association, Bird Club, Old Timers Club, Suggestion Committee, Manufacturing Committee and President of our Credit Union.

"He was a man of high character, of great ability and could always be depended on to do his part. He was ready to give his frank and unbiased opinion and advice to anyone who sought it.

"In town affairs he was always ready to do his civic duty, having served on the Town Financial Committee (Committee of Fifteen), and on the Prudential Committee of the Union Congregational Church, where he was Treasurer for a number of years. He was identified with the various Masonic bodies and was a member of the Mystic Shrine.

"He leaves a wife, Lucy Allen Sumner, and three boys, Charles Allen, 12 years, Roger Hayward, 10 years, and Warren Ellis, Jr., 7 years, to whom we extend our heartfelt sympathy. His passing away is a great loss to us all.

"To our friends in distant plants, who are not in touch with the details, we would say that Mr. Sumner was apparently in his customary health up to within ten days of his death. On his last day at the laboratory he complained of a headache and went home. From then on he grew gradually worse, first apparently from a bad cold which seemed to develop into the grippe, and finally from an attack of meningitis. The very best medical attention was given him at the Phillips House, Massachusetts General Hospital, Boston, but it was of no avail and he passed away at 10.30, Monday evening, March 12.

"His sudden taking away in the prime of his life is a great shock. I feel



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1903 Continued

it a great personal loss to thus lose one with whom I have been so closely associated for many years, both in business and in outside interests."

W. F. Currier has become a member of the firm of Booth, Garret & Blair, Analytical and Consulting Chemists, Philadelphia, Pa.

John F. Ancona, who was formerly with the Eastman Kodak Co., has now been for some time doing consulting work for himself at Rochester. He was one of the organizers of the Tech club there and Secretary for a long time.

B. W. Latham is in New York on appraisal work with the Cass Gilbert Company.

We are indebted to Virgil M. Palmer of the Eastman Kodak Co., Rochester, for various news items. He is at present the Secretary of the Licensing Board of New York State for the licensing of professional engineers and land surveyors, which was created under a law sponsored and carried through to enactment by Senator Ferris of our class.

At the class business meeting during the reunion last June the question was discussed of providing some means for keeping the Secretary in closer touch with members of the class in various parts of the country. It was decided for this purpose to divide the country into sections and appoint a regional committee consisting of one man in each section where there were enough '03 men to warrant it. This committee was to be under the direction of the Secretary to gather information or to offer such cooperation from time to time as might be required.

It was voted that this Regional Committee be authorized and the following men were elected: Boston and vicinity, Harry A. Stiles; Northern Massachusetts, Myron H. Clark; Maine, George B. Wood; Rhode Island, Ralph W. Eaton; Connecticut, Charles P. Waterman; New York, Hewitt Crosby; Philadelphia and vicinity, J. W. Aylesworth; Pittsburgh and vicinity, E. H. Millard; Washington, D. C., Gerald F. Loughlin; Ohio, Lawrence H. Underwood; Chicago and vicinity, H. S. Baker; North Pacific Coast, Fred A. Olmstead; South Pacific Coast, Walter H. Adams.

1905

ROSSELL DAVIS, *Secretary*, 19 Thorndike St., Beverly, Mass.

S. T. STRICKLAND, *Assistant Secretary*, 26 Pemberton Square, Boston, Mass.

In the July Review we promised a Reunion Flivver. It never came out — never reached the assembly stage. Most of the parts were missing. The two trained journalists promised to review the reunion but both kept their thoughts, while the photographs were of small calibre — though high quality — and hardly suitable for reproduction. We were sorry, for we had planned to get the story, in this way, to every member of the class, whether or not a Review subscriber or a payor of class dues. We wanted to remind even the "dead ones" that we were holding reunions and hoped to stir up at least a passing interest which might blossom into something more real before the next, our Twentieth, when we are going to have a big time.

Some time ago, there came to our attention a program of the annual convention of the Pennsylvania Electric Association. The feature of the Technical Session was a three pole tilt on Inductive Coördination, phase M supported by Charlesworth, phase I by Chesterman and phase T by Damon, all '05. This seemed like a put-up job on the P. E. A. (or '05) and having no idea what the Three Electroliers were fighting about, we appealed to Damon for illumination.

He says: "You are wrong in your premises — we were holding a peaceable and friendly study of how to solve mutual problems which we used to fight about under the name of 'inductive interference' before the days when real broadminded '05 men like Charlesworth and Chesterman and lesser lights of the class like myself had had time to make our influence felt in the great waves of turmoil which arose from ungentlemanly conduct of stray currents and stray fields and stray hot tempers of unenlightened men. (Not bad, Ed.)"

"Charlesworth is Assistant to Vice President Gerhardt of the American Telephone & Telegraph Co., and has done much of the heavy work and attended most of the meetings, I hear, in the joint work of the American Telephone & Telegraph Co., and the National Electric Light Association on Inductive Coördination. This work is laying the foundation for telephone and electric power services to be given to the public without either undue noise in the telephones or excessive expense for the telephone service or, on the other hand, forcing the power service to excessively expensive or impractical methods. It is a work of nation wide scope and immense value to all in the near future. Chesterman has had a less nation wide part in this work but, as Chief Engineer of the Pennsylvania Bell Telephone Co., he is a prominent figure in Pennsylvania electrical affairs. I served three years on the N. E. L. A. Committee on Inductive Coördination and am much interested in the progress of the work, although having no active part in it now."

Damon modestly refrains from mentioning that his was one of the three best papers which were printed and distributed at the convention. He was at that time Superintendent of Service for the West Pennsylvania Power Co. He says his job was to make the customers think they were getting the fine service which they weren't. Now he is one of the senior engineers for Stone & Webster, Boston.

Raymond Bell, consulting industrial and management engineer, with offices in the Woolworth Bldg., New York, was a prominent figure at the National Merchandise Fair held last summer. He was retained by the National Retail Dry Goods Association, under whose auspices the fair was held, as manager to assist exhibitors in planning their displays. He was

at their call to advise as to the proper presentation of their products, the value of seasonal appeal and all other problems relating to distribution.

Prince Crowell has left the National Aniline and Chemical Co. and is now factory manager for the Enterprise Dye Works, Woonsocket, R. I.—After a long illness, Ed Coffin is back at his desk with the Associated Massachusetts Industries at a new address, 950 Park Square Bldg., Boston.—E. A. Burkhardt is statistician and advertising manager for Hale, Waters & Co., Sears Bldg., Boston. Electric utility bonds is the business.—Frank Payne has gone to England to start a branch of his firm, the Crane Packing Co. He may live in the East on his return to the United States in a year or two.—An interesting article by W. G. Housekeeper on "The Art of Sealing Base Metals through Glass" appeared in the September number of the *Journal of the A. I. E. E.*—"Ten Nights in a Stateroom" is the title of a brochure by W. K. Lewis on his recent trip to the Pacific Coast and Texas for the Standard Oil Co.—W. H. Warnock was recently appointed city engineer of Montclair, N. J.—Jim Barlow, city manager for New London, Conn., for the last two years, resigned on September first.—At last, we have H. R. Robbins lined up. His business address is New York City, his residence, Kalgoorlie, Western Australia. What about a champion commuter?

President Charlie Clapp, of the University of Montana, has been investigated. A special senate committee examined the university and in its report said: "President Charles H. Clapp, whose services at the state school of mines and for several months past as president of the university, are so familiar to our citizens, it is hardly necessary to comment thereon. However, in passing, it is entirely proper that your committee should, as a matter of appreciation, call attention to the capability of President Clapp and emphasize his value to the university system of Montana."

The *Transcript* illustrates an eight-story apartment hotel being built on Bay State Road, Boston, overlooking the Charles. The exterior we guess is American Georgian, while the interior fittings will be in the style of the old furniture man, Sheraton, whose name the house bears. Sid Strickland is the architect.

The reaction from the assessment of last spring has not been up to the usual standard of the class, about twenty-five per cent coming through to date. See if the blue card is not in that "miscellaneous" pigeon-hole and send it in. The returns from the referendum on the Alumni Athletic Fund showed fifty-eight "yes" and four "no" so we sent the check to Dr. Rowe. You will recall that it covered a \$50 annual contribution for two years, after which time, if help is still needed, the question will again be put to the class.

Edward H. Bartlett died on September six as the result of an injury from being run down by an automobile. Bartlett was living at his father's farm in Newburyport. Members of Tech Show will be sorry to hear that Johnny Coleman, ballet master, has passed away.

We have been admitted to the Eight-Issue Club, which means only that these notes will appear in every issue. Inexperienced, we didn't dare attempt it last year, but we will not sit back longer and allow other classes to beat us out. Watch for us next month.

1907

BRYANT NICHOLS, *Secretary*, 2 Rowe St., Auburndale, Mass.

HAROLD S. WILSON, *Assistant Secretary*, W. H. McElwain Co., Manchester, N. H.

Word has come indirectly of the death of John Brotherlin on February 8, 1923. The Secretary has no details.—L. Dana Davenport has his office at 307 First National Bank Building, Duluth, Minnesota.—Nat Middleton, who has been located in Boston for years, is now with the Ohio Body & Blower Co., Cleveland, Ohio.—The engagement has recently been announced of Miss Evelyn Fowler of Concord, N. H., to Harold D. Reed of Brookline. Reed is Manager of the Traffic Department of the New England Telephone and Telegraph Co., whose office is at 50 Oliver Street, Boston.—DeWitt C. Ruff, 727 Portland Avenue, St. Paul, Minn.—F. B. Shields is with The Barbasol Company, 537 North Capitol Avenue, Indianapolis, Indiana.—Robert P. Stevenson, 55 Stevens Street, Lowell, Mass.—Lawrence Wetmore, from whom we have heard nothing for years, is with the Goodyear Tire Company, Akron, Ohio.

1909

CHARLES R. MAIN, *Secretary*, 200 Devonshire St., Boston, Mass.

GEORGE A. HAYNES, *Assistant Secretary*, 186 Lincoln St., Boston, Mass.

On Saturday morning, the twenty-third of June, the Boston delegation of the Class of 1909 gathered on the steps of the Boston Public Library, in the usual drizzle of rain, preparatory to starting by automobile for the Powder Point Hall, Duxbury, Mass., where the class was to spend the week-end for its annual outing. From Providence, Hartford and other points, other machines were heading toward the objective point. By early afternoon, most of the crowd had arrived for the party, which started promptly upon the arrival of Jim Finnie with the fixings. Chick Shaw and Bob Inglee showed up Sunday morning, making a total of fifteen. The following answered to roll call: Dawes, Davis, Faulkner, Finnie, Fisher, Inglee, Main, Marshall, Mrs. Marshall, Sharp, Shaw, Spencer, Temple, Thornley, and Willard.

By early afternoon, the skies had cleared. We had expected to take the usual boat trip down the bay, but unfortunately no boat was available, and so the day was spent in playing tennis and in renewing old friendships. In the evening, the crowd strolled up to the beach and later came back to the cottage, which we had to ourselves. The rest of the evening was taken up by

A Life of Francis Amasa Walker

Third President of the Massachusetts Institute of Technology

By James Phinney Munroe



GENERAL WALKER was eminent as a soldier, a statistician, an economist, an administrator, an educator, and, above all, as a man.

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The Opinion of the Press

Boston Transcript: "The first thing which strikes the reader of this biography is the many sidedness not only in character but in achievement of its subject . . . Yet after all it is as the 'Preserver' of Technology that he will be given his most lasting fame, although Walker the president and administrator does not dim Walker the man. President Hadley of Yale once said that General Walker knew more things worth knowing than any man of his acquaintance . . . Mr Munroe is eminently fitted for his task as biographer."

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of thought with sincere respect for the heritage of the past, unflagging zeal for the public good with a total absence of priggishness or cant, intellectual ardor with splendid gallantry as a soldier, and a keen interest always in whatever makes for physical and excellence."

The Nation: "Mr. Munroe's volume is distinguished by its fine balance in the presentation of the character and achievements of a many-sided being. To him, Walker has never ceased to be a living influence, and it is Walker the man who stands forth in these pages."

N. Y. Herald: "Mr. Munroe is well qualified for the great task of this biography, as he was secretary of the faculty during a large part of Walker's administration of the Institute and has had access to all available data. Besides that, he is a master of a clear, simple and vigorous style, which makes the narrative highly readable. He has also shown excellent judgment in the selection and arrangement of his material."

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1909 Continued

the usual "big league game." It was not recorded who was the lucky one, but "a good time was had by all." The meeting adjourned some time prior to Sunday morning.

Sunday turned out to be a beautiful day, ideal for the outing. After breakfast, the crowd sat on the steps of the hotel for the class picture and then held a meeting on the wide veranda. Plans were discussed for the Fifteenth Reunion in 1924. It was thought that the best time for the meeting would be from June 20 to 22, and it was decided to hold the reunion at Powder Point Hall. It was also decided to invite the wives, and a committee will be appointed to plan something of interest for them. It is expected that a circular letter will be sent to all the class about January 1, 1924.

Soon after dinner, most of the men began to think of getting back home, and by ones and twos left during the afternoon.

Thomas C. Desmond was married to Miss Alice B. Curtis of Bridgeport, Connecticut, on August 16. The wedding was followed by a large reception and dance at Waldemere, the home of the bride's parents. Desmond is President of T. C. Desmond & Co., Inc., Engineers and Contractors, New York City.

The Secretary is pleased to acknowledge the receipt of a babygram announcing the arrival of Charlotte Nisbet on July 28.

Lieutenant-Colonel Fred M. Green, formerly at Fort Barrancos, Florida, has been transferred to Fort Munroe, Virginia.

1911

ORVILLE B. DENISON, *Secretary*, Room 3-207, M. I. T., Cambridge, 39, Mass.

JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Ave., Medford, Mass.

First of all must come the announcement that at the meeting of the Corporation of the Massachusetts Institute of Technology on Wednesday, October 24, R. T. Haslam, '11, was made a full Professor of Chemistry. We are all certainly proud of you, Bob.

Two of our prominent mining engineers have again been filled with the "Wanderlust" and Jack McAllen has returned to the mines at Wasilla, Alaska, while Frank Osborn is once more down in Chuquicamata, Chile.

Just as was anticipated, your Secretary in his trips around the country as Executive Secretary of the Alumni Association, has met a lot of '11-ers and expects to continue to do so in the future, much to his delight.

In Providence during the latter part of September, I spent a lot of time most happily with Chet Morey, President of the Technology Club of Rhode Island, and also had a nice chat with Ray Lord.

When in Akron, Ohio, on the last Saturday in September for a joint meeting of the Akron and Cleveland clubs, I spent the week-end with B. Darrow and his wife and youngster. A fine time was had by all. In addition, the following Eleveners were met: Harry Alexander, Joe Dunlap, Karl Kilborn, Larry Odell, and Bill Shepherd from Akron; and C. R. Johnson and R. S. Simonds from Cleveland.

On the way home from Akron I stopped off at Baltimore and was entertained at dinner by Lloyd Cooley and f. w., while this month (October) when I visited Lawrence, Mass., I was more or less personally conducted around the city to very excellent advantage by John Alter and also saw Walter Wilson. Strangely enough I met no '11-ers in Lowell, Mass., or Portland, Maine.

John Herlihy and I have arranged a 1911 dinner and bowling match for the evening of November first and at this writing (October 25) favorable replies have been received from Clark, Coupal, Denison, Ell, Haines, Hall, Herlihy, Jenks, Richmond, Stewart, and Van Tassel.

Just a word in closing. You will notice that these notes are much shorter than usual and that prompts me to remind members of the class that the w. k. slogan "Write to Dennie" should be even more potent now that the aforementioned "Dennie" makes his headquarters at the Institute. As Shakespeare—or was it Bacon?—wrote or might have written:

"Although my tasks in life are many,

"I must find time to 'Write to Dennie'!"

1912

FREDERICK J. SHEPARD, JR., *Secretary*, 568 E. First St., South Boston, Mass.

Although 1912 news is very scarce, what there is of it is of first quality. In the *Halifax Morning Chronicle* for October 4, a very interesting account was given of the wedding of Miss Laura Maclean to Bernard Hudson Morash. They are to make their future home in Beloit, Wisconsin, at 1277 Wisconsin Avenue.

1913

F. D. MURDOCK, *Secretary*, 30 Bartlett Ave., Arlington, Mass.

R. C. THOMPSON, *Assistant Secretary*, Federal St., Boston, Mass.

For what pleasure you get in reading these notes, you may thank Stan Parker and Charlie Thompson. The story of the reunion is theirs. Lest by chance they neglect to mention anything of serious nature I must say here to the Secretary's credit that he did his utmost to put across his resignation. In the midst of his remarks at the grand banquet he was forced to his chair with a volley of bread, rolls, and olives. It was a most undignified scene.

The engagement is announced of Frances O'Callaghan of Medford to John B. Welch, now of Shreveport, Louisiana.—Miss Dorothy Munch of Arlington was married in August to Professor Tenny L. Davis, M. I. T. Congratulations and best wishes to you both, John and Tenny. Tenny is in the Organic Chemistry Department of the Institute. In addition he is

on explosives research for the Ordnance Department.—Bob Daggett, XI, is the proud father of Louise Katherine, born on August 5.

Our report in the July number of John Coe's work for the U. S. Rubber Company was garbled. What we should have said was that John looked after tire work mostly. He is back in New York after travelling around the country for over a year.—Joe Font, XI, has resigned his professorship of Military Science at the College of Agriculture at Mayaguez, Porto Rico. He is now Engineer in charge of Public Improvements for the City of San Juan, Porto Rico. Joe gets \$7000.00 a year for his work in designing and constructing water works, sewers, roads, etc. Two other Tech men work in his office, F. D. Marquez, ex '09, and Harry Preston, '22. In connection with his work as Chief of the Research Department of the American Cyanamid Co., G. A. Vuchana, V, made a trip abroad, which prevented his attending the reunion.—Joe Cohen, who was in evidence at our June party, is Vice President and General Manager of the Atlantic Gelatin Company, Woburn, Mass.—The Class Secretary has left Buffalo and will work for a large textile corporation at one of their eastern cotton mills. He had an interesting visit in New York with Joe Strachan, who is doing interesting and important work for the Allied Chemical Company as works manager of their Hudson River plant at Edgewater, N. J. He also saw Ralph Rankin at his most impressive "big executive" type office in the telephone building in New York City. Ralph is solving some original problems for the telephone company in the line of office management. At Boston he saw Hap Peck still effervescing with his original brand of pep. Hap is at last settled upon his chosen field of work, the practice of patent law. He has been studying hard at night school and will be ready next fall for his bar examinations.

Now for the story of the reunion:

Back in the early part of the year when the committee was working out the plans for reunion, we knew it would be a grand get-together, and, it sure was. Sixty-three hearty, but not yet hale, members of the Class of 1913 made the three days, June 15, 16, and 17 a reunion to be proud of.

A goodly number went down to Provincetown by boat on Friday morning, thence by auto bus to Wellfleet, where Chequesset Inn is located. The rest made the trip by auto. Friday afternoon the committee had nothing to do to keep the bunch amused. Everyone was so glad to see everyone else that a good old talk-fest was the first thing that led the program.

Stan Parker was keeper of the log, and what he missed, somebody else was on hand to record. This is no reflection on Stan's ability as a log keeper, but he did have hard work keeping hold of the log.

After dinner, Friday evening, we gathered around the piano and as the log says "indulged in singing and gargling." Of course, some of the voices were out of practice, but they got better as time wore on.

Saturday morning a few athletic events took place, and from the way things went, it would look as though some of us were missing our daily dozen.

Smith and Weller won the three-legged race. They were the only ones who didn't trip and fall down.

The fifty-yard dash was won with Fallon, Cogan, and Livingston finishing in the order named.

Thompson's Team won the Relay race, but they couldn't have run another.

Of course, all the events were more or less humorous, but the standing broad grin took the prize for producing the most laughter. You may not believe it, but by actual caliper measurement Rand has a more open countenance than Benny Munch.

You all remember the Tug-of-War back in the old Freshman-Sophomore Field Days. But the one we had this time was way ahead of those times. Jerry Fallon's Team pulled the rest over the mark. Not without working, but real decisive at the end.

Saturday afternoon some played baseball, some golf, while others went fishing, but all put on their bathing suits and had a good swim toward the close of the afternoon.

Saturday night the big banquet came and it was a small edition of our graduation affair. No speeches were made, but there was plenty of talking and lots of noise. As the climax of the reunion, it was all that could be asked for.

Sunday morning things began to break up, and when the afternoon boat sailed, with the last of the crowd, Chequesset Inn breathed a sigh—not entirely of relief—but still a bit relieved.

The reunion was a success. It paid for all the effort your committee put into it. When the time comes for our Fifteenth, the boys will be on hand and we'll have another time that will do 1913 proud.

1914

H. B. RICHMOND, *Secretary*, 62 Tufts St., Arlington, 74, Mass.

G. K. PERLEY, *Assistant Secretary*, 45 Hillside Terrace, Belmont, Mass.

The Secretary has been absent from Boston during the most of the past month and accordingly has not had much time to attempt to scare up any news items. Advantage was taken of every opportunity to look up Fourteeners, but as time in any one place was very limited, usually a matter of hours, most of the cities had to be passed up without as much as a telephone call to local men. Two of the several very pleasant visits are worthy of special mention.

The first was in St. Louis with Phil Morrill. Your Secretary had the pleasure of being Phil's luncheon guest at the St. Louis City Club. Phil had just returned a few days before from a seven-thousand-mile inspection trip of the various Bemis bag factories. His trip included Minneapolis, Seattle.

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1914 Continued

San Francisco, Los Angeles, thence east to the Gulf States and up the Mississippi Valley to St. Louis. Mrs. Morrill and daughter Jean, who is already five years old, also took the trip. Phil was looking unusually well and happy and professionally is engineer for the Bemis Bro. Bag Co. He claimed the smile to be due to the fact that he expected to come East next summer to attend 1914's grand Ten-Year Reunion.

Mrs. Richmond and your Secretary spent a very pleasant Sunday afternoon with Charlie and Mrs. Fiske at Kansas City. Charlie was East for a short while this past summer, but did not have much time to look up Fourteeners. Charlie is only now really recovered from a very serious case of pneumonia which he had last winter. While not thoroughly at home in Kansas City, Charlie said that he was very much interested in his work with the General Motors Acceptance Corp. He is Manager of the Kansas City office. Like Phil Morrill, Fiske said he was most certainly coming East for the reunion next summer.

The telephone group in New York were on hand as usual. Horton was at the Western Electric Co., and although his office was an example of orderliness, his laboratory was a veritable maze of wires and instruments. Horton has been doing some very interesting work on frequency instruments and only recently presented a paper on this work before the American Institute of Electrical Engineers. There were a number of other Tech men very much in evidence at the Western Electric laboratories, including Professor Green, formerly of the Dynamo Laboratory.

Over at the American Telephone & Telegraph headquarters on Broadway, Affel was found monarch of a large office devoted to carrier frequency problems. Shrimp Leonard, formerly of the T. E. M. Laboratory of the old 'Stute, was found trying to solve something about delta rho and delta theta, which have long since ceased to have a meaning to your Secretary. Jack Hines was away on a trip to Chicago.

Percy McCullough has left the Bemis Bag organization and has gone to England to act as a cotton purchasing agent for his father-in-law, who is a bag manufacturer in Australia.

While in St. Louis, signs of an air meet held the previous week were still posted. On inquiry, it was very evident that Pat Adams had been very much present, if not always accounted for.

Stanyon of the Ohio Brass Co. at Mansfield, Ohio, was scouting around Chicago recently and your Secretary was unfortunate in missing him by only a few hours.

Does anyone know where Bob Patten is? He is supposed to be in Cleveland, but when I tried to locate him at his last known address there, he was totally unknown.

While in Detroit, a visit was paid to Henry Ford's little workshop. A

sharp lookout was kept for Dana Mayo, but no trace of his six feet ten inches could be found among the veritable army of employees all working elbow to elbow.

There has been little local interest during the past month. The Alumni Council started its fall meetings. One of the most interesting announcements was that of the All-Technology Reunion of 1925.

The 1914 Boston luncheons for the season will be started on November 6 and a big season is planned. The Ten-Year Reunion plans will be discussed at these luncheons.

1915

FRANCIS P. SCULLY, *Secretary*, 118 First St., Cambridge, Mass.

HOWARD C. THOMAS, *Assistant Secretary*, 100 Floral St.,
Newton Highlands, Mass.

No notes received from the Secretary.

1916

WILLIAM W. DRUMMEY, *Secretary*, 533 Washington St., Dorchester, Mass.

E. H. CLARKSON, *Assistant Secretary*, Sante Fe Ranch, Del Mar, Calif.

No notes received from the Secretary.

1917

RAYMOND S. STEVENS, *Secretary*, Room 3-205, M. I. T., Cambridge, Mass.

Either these notes exert an influence over the future of some of the men mentioned, or the first dribble of news to them is frequently a forecast of greater things to come. As an instance, Doug McLellan was referred to last month as doffing his jaunty cap to a young lady. Now we have the announcement from the *Transcript* for September 15 of his engagement!

"Miss Polly Adams Pierce, the daughter of Mrs. Winslow Claflin Pierce of 466 Commonwealth Avenue, announces her betrothal to Douglas Hull McLellan of Boston."

And then we last month noted Hegenberger's trip to the new Boston Flying Field. A Washington dispatch to the *Herald*, published on October 15, described an even more interesting flight over the same course.

"Announcement was made by the Army Air Service today that in a recent flight from McCook Field, Dayton, Ohio, to Boston, the practicability of navigating an airplane accurately by the use of instruments alone and without the aid of landmarks was demonstrated. This unique cross-country, non-stop flight was made by Lieut. Albert F. Hegenberger and Bradley Jones, navigation engineer at McCook Field, on September 6. The greater part



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1917 Continued

of the journey was completely out of sight of land and at an altitude of more than 10,000 feet.

"Lieutenant Hegenberger and Mr. Jones took off at 10 o'clock in the morning in the face of reports of adverse weather conditions. They used a stock De Havilland plane, modified to carry larger gasoline and oil tanks than usual. A complete vertical instrument board, holding an air speed motor, a flight indicator and earth inductor compass dial was placed in the front cockpit. The rear cockpit was especially fitted to facilitate the taking of sextant observations. It contained a magnetic compass, and the control dial of the earth indicator and in the floor was a large drift sight.

"Lieutenant Hegenberger estimated at 3.40 o'clock that he should be close to the Hudson River, descended through the clouds and the Hudson was crossed not five minutes later. From the Ohio to the Hudson the trip was made without a sight of earth. The flight was continued under the clouds, passing over Hartford, which was recognized and which gave the first check on the course after 400 miles of travel. As Hartford was only a few miles off the direct course, the aviators were delighted with the results of their experiment.

"The new airport at Boston was reached without incident and a landing made at 6.25 o'clock in the afternoon, making the time consumed by the flight 7 hours and 20 minutes. Only a small ration of gasoline remained in the tank.

"Lieutenant Hegenberger, who has been in charge of the instrument branch of McCook field, is one of the foremost exponents in the Army of the use of navigation instruments in flying, and as an example of such use, this flight is looked upon as a remarkable achievement."

The famous Rad Stevens also continues to take up space in these columns. We quote the *Elgin News* for September 29, 1923.

"The announcement of the engagement and approaching marriage of Miss Helen Rinehimer, daughter of A. C. Rinehimer of 158 Kimball Street, to G. Radcliffe Stevens, foreman of the train department of the Elgin National Watch Company, was formally made this afternoon and comes as a surprise to their many friends in this city.

"News of the betrothal of the popular couple was revealed to a group of intimate friends of the bride-elect, who were entertained by Mrs. Charles Rinehimer at her home, 1018 Prospect Street. The date of the nuptial has not been set.

"Following a program of bridge, little Miss Elizabeth Rinehimer, daughter of the hostess, brought into the room a large white duck, which announced, 'my duck bears a tale!' The opening of the duck revealed a miniature bride and groom surrounded with candy, to which were attached hearts bearing the announcement.

"Miss Rinehimer is one of Elgin's well known young women. She is a

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1917 Continued

graduate of the local high school and later attended Rockford College. The bride-elect is a member of the Church of the Redeemer.

"Mr. Stevens, who came to this city from Boston, Mass., to reside several years ago, has made a large circle of friends here. He is a graduate of the Boston Institute of Technology. He was President of the Kelley Booster Club, an organization which backed the present mayor during the pre-city election."

It has been some time since we had much to say concerning Clark Robinson. It will be remembered that he was once largely responsible for new and spectacular Tech Show scenic work. The position in this field that he has now attained is affirmed by the very favorable comments concerning his work which have appeared in the press. For example:

"By virtue of his remarkable work on the settings of 'The Green Goddess,' Clark Robinson, the young American designer, challenges the best Joseph Urban, Alan Craig, Norman Bel-Geddes and others of the craft have offered in the past decade, which has been one of the most notable in the history of the stage architecture. In this widely discussed picture, Mr. Robinson was called to furnish the necessary atmosphere of a mythical Kingdom ruled by a ruthless Indian rajah. Matters were further complicated by the fact that this particular Rajah had been educated at Oxford. It was therefore essential to indicate in the settings of the palace the peculiar resultant taste of an Oriental who had spent the most formative period of his life in the highly civilized countries of Europe. That his work was well done is evidenced by the marvelous sets in 'The Green Goddess.'

"Mr. Robinson is an excellent example of the type of man the cinema is attracting these days. He is a graduate of that most difficult of all educational hurdles, the Massachusetts Institute of Technology. There he specialized in architecture and from the start was interested in this profession as it could be applied to the stage.

"Following the War, during which period he served in the Aviation Corps, Mr. Robinson was engaged by George Eastman to design the stage of the internationally famous Eastman Theatre at Rochester, N. Y. This work attracted the attention of S. L. Rothafel of the equally famous Capitol Theatre, New York, probably the finest house of its kind in the world. As a result, the Capitol soon had a new art director and his name was Clark Robinson. As a side issue during his period, the young man also acted as art director for Irving Berlin's Music Box Revue, which incidentally had more art than anything seen on Broadway for some time previous.

"It was about this time Mr. Robinson was engaged by Arthur S. Friend, President of the Distinctive Pictures Corporation, and he has acted in the capacity of Art Director for 'Disraeli,' 'The Ruling Passion,' 'The Man Who

Played God,' 'Backbone,' 'The Ragged Edge,' 'The Steadfast Heart' and as aforementioned, 'The Green Goddess.'"

Walt Beadle has succeeded Deck Tutein as Secretary of the Philadelphia Tech Club.—Dutch duPont dropped into the Institute during the month, his first visit since 1918. He now divides his time between Wilmington and New York, looking after some of the duPont business interests.—Joyce R. Kelly is with the Research and Information Service of the Policy-holders Service Bureau of the Metropolitan Life Insurance Co. His department gives technical advice on inquiries received from group policy-holders.

Stan Dunning has left the Dover Stamping Company of Cambridge, and has gone with the Central Stamping Company at New York. His office is now at 206 Broadway, New York City, and he expects to be engaged mainly in sales work.

Stan Krug, VI, sent in the following bulletin of the *Inland Press Association* which has the interesting item concerning Lin Noyes and his newspaper:

"The Ironwood, Michigan *Globe*, issued a 46-page edition on August 27, while the Legion convention was held there, filled with mighty good things to read, including a very generous lot of advertising.

"Messrs. Quirt, the editor, and Linwood I. Noyes, the manager, are certainly to be congratulated. Yes, it's an Inland paper, and Mr. Noyes attends meetings, and studies every proposition, and that's why in a little over three years he has built up one of the leading dailies of Michigan."

Krug himself is in the consulting game at 108 Bell Block, Cincinnati. He writes, "After leaving the State Highway Department of Ohio, where I held the position of Assistant Chief Engineer, I returned to my native haunts and opened up an office specializing in highway work. It may seem rather peculiar for a Course VI man to jump to highway work, but it speaks well for Tech when you can do that and get away with it. I spent a pleasant two and a half years at the State Capitol, but my politics were not to the liking of the new Governor, so I had to find something elsewhere.

"Received quite a nice letter from McDaniel, who is still in the Navy at Puget Sound and he is having the time of his life. In addition to his Navy duties, Mack is still writing music and we ought not to be surprised to see him as the author of some good piece soon. Coleman, '16, II, is in Kentucky operating coal mines and a big construction company and I see him frequently. If any of the boys get out this way, I want them to drop in and I'll show them some old Cincinnati hospitality."

1918

P. W. CARR, *Secretary*, 400 Charles River Road, Cambridge, Mass.

At request of our worthy President, I have been pressed into service in an attempt to fill the shoes left vacant by the resignation of Julie Howe.

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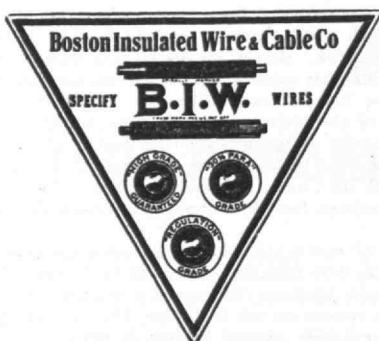
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1918 Continued

The appointment was relatively recent, so that I beg the forgiveness of all our classmates in not representing the bunch by more adequate notes in this issue. We all sincerely hope that the Course Secretaries hitherto assisting Mr. Howe will continue to pass in all the dope that they encounter.

Bob Van Kirk left last Saturday for Pomona, California. His new address there is 725 North Gerr Avenue. He will be mighty glad to hear from any of the crowd who get out that way.

The writer bumped into Gretchen Palmer on Congress Street a few days ago. Gretchen has heard the call of her native haunts and is back here associated in business with her father.

The following clippings from recent papers have been received.

From the *Boston Evening Globe* for October 12: "Miss Lillian Theresa Piotti, daughter of Mr. and Mrs. Ambrose Piotti of 98 Melville Avenue, Dorchester, was married at a nuptial mass at St. Ambrose's Church this morning to Frederick Granville Moynihan, son of Mr. and Mrs. George Moynihan of New York. Robert Curtis Erb, Technology 1918, of Nashua, N. H., was best man."

From the Newburyport, Mass., *News-Herald* for September 22, 1923: "Mr. and Mrs. Charles Reed Rowson of Chicago have issued announcement of the marriage of their sister, Sarah Augusta MacArthur to Ralph John Bushee, which took place in Chicago on September 8."

Bushee is a sanitary engineer employed by the Health Department of Chicago.

From the *Boston Post* for September 23, 1923: "Mr. and Mrs. William B. Cabot of 447 Marlboro Street, announced the engagement of their daughter, Mary Minot Cabot, to George Rainsford Martin of Rye, N. Y., son of Mr. and Mrs. Mulford Martin, also of Rye."

"The wedding will take place in the early fall and probably at Dublin, N. H."

From the Pittsfield, Mass., *Eagle*, for July 25, 1923: "The honor belongs to a Pittsfield man in a large part of developing the first land sound range system used by the United States Army for locating guns on land and organizing the first land sound range company that the United States army ever had. This system of sound ranging was used by the French during the World War in the locating of the big German guns that fired on Paris near the close of the War. This man is Captain Granville B. Smith, now a special representative of the New England Mutual Life Insurance Company, who recently has made his home in this city."

"Captain Smith served in the 54th and 56th regiments in France from December, 1917 until the end of the War and had command of a battery of artillery at Chalons-Sur-Marne during the months of June, July and August, 1918. Following his artillery work, he was detailed to the aviation service as an observer, where he learned to fly. He did not see any active service as an observer, as the Armistice came just after completing his course. After the Armistice, he served with 100 other officers under General McKinstry, on a commission appointed to determine the damage done to France, Belgium and Italy by the Germans, and to help check the reparations figures made at the peace conference. He was in the Army of Occupation until June, 1919."

"After coming back to America, he graduated from Massachusetts Institute of Technology while still in the Army. Upon his graduation, Captain Smith was attached to a S. A. S. R. unit under Colonel Abernethy, engaged in the development of subaqueous sound ranging in locating submarines. The unit used the Crufts Laboratory at Harvard College in their experimental work. In 1921 he was sent to Camp Eustis, Va., to organize a land sound ranging company. A target range was laid out on an island in Chesapeake Bay and wires were laid through swamps and woods and automatic listening posts installed. The officer in charge of the guns was able to tell exactly by sound, where his own shots were landing and so correct his aiming. Eight inch howitzers and 155 millimetre G. P. F. guns were used in the target practise work. While engaged in this work he organized the first land sound ranging company and wrote the Army regulations for future companies."

"Upon leaving Camp Eustis, he was sent to Fort Munroe, Va., to take command of a mine company, where he remained until he left the Army in November, last year."

"Captain Smith was gassed while in France and convalesced in a hospital outside of Paris. During the War he helped with the development of radio communication between airplanes."

"He later resigned and entered the laboratories of the Western Electric company in New York City as an engineer. He worked there in the perfection of synchronizing the phonograph motion picture machine. He predicts that a year from now all motion pictures will be accompanied by the speaking voices of the actors."

The writer is very anxious to get some comment in the way of telephone calls, personal calls, or letters from the crowd living in this vicinity as to the feasibility of an occasional class luncheon or supper. Please shoot your ideas along as well as any information you may have concerning your own actions or reports of the actions of others.

1919

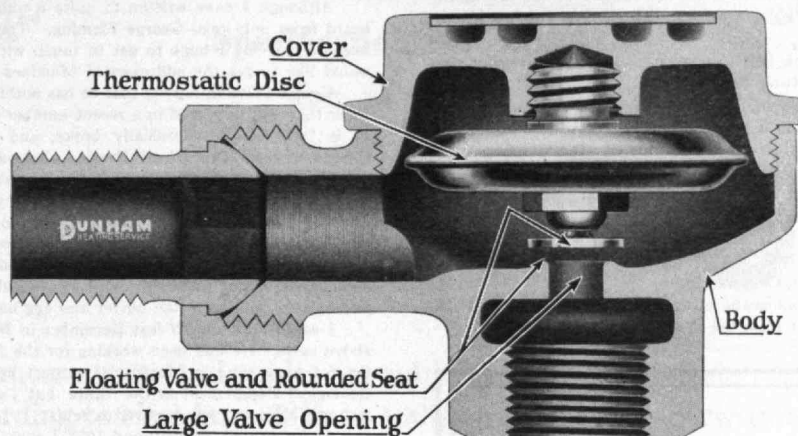
PAUL D. SHEELINE, *Acting Secretary*, 19 Congress St., Boston, Mass.

It has been several months now since 1919 has broken into print. During the summer months, the issues of the Review are suspended and this gave everybody a chance to rest up and prepare for the fall. Your Secretary had hoped that this enforced rest would result in a multitude of material for the December issue. In this he was in error as the news which we are to print is little more than meager. There are several things, however, of importance

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1919 Continued

which should be taken up at this time and should be kept foremost in our minds throughout the next year. Our reunion is to be held on June 27, 28 and 29, 1924, in Duxbury, Mass. The place selected is admirably suited for such a reunion. We shall be alone in a delightful spot which offers wonderful living quarters, superb meals, unexcelled bathing, championship golf, fine tennis, good boating and last but not least glorious weather. In the coming months you will hear much more about this reunion, but the main point now is to keep the date in mind so that you can make plans in order to be there. We will be limited to accommodations for seventy-five men and this means that when the times comes for the call to go out, the first seventy-five who definitely signify their intention to come will be selected. The Boston committee who is in charge of this reunion is composed of William B. Snow, Larry M. Dalton and Paul D. Sheeline, but every member of the class should consider himself a committee of one to see that enthusiasm for the event is forthcoming. As has previously been stated, you will hear more about this as time passes. However, remember June 27 to 29, Friday, Saturday and Sunday.

Mr. and Mrs. Arthur Barker announce the engagement of their daughter, Dorothy Rose, to Mr. Holley Stetson Winkfield.

Dr. and Mrs. Howard Paxton Collings announce the marriage of their daughter, Clarinda Blackman, to Mr. Francis Octavus Wyse on Wednesday, the twenty-seventh of June, nineteen hundred and twenty-three at Hot Springs, Arkansas.

Mr. and Mrs. John H. Pogger, of Chelmsford, Mass., have announced the engagement of their daughter, Vivian Pogger, to Frank Babbitt of Fairhaven, Mass.

Ernest F. Perkins has been appointed assistant professor in Chemical Engineering at Northeastern University. After graduating from M. I. T. in 1919, he took his masters' degree in 1920.

Mr. and Mrs. F. H. Crow of Somerville, Mass., announce the marriage of their daughter, Helen Winifred, to Mr. Arthur Ellsworth Page of Medford Hillside, Mass. The young couple will live in Medford Hillside, where they will be at home after September 1.

A recent wedding of great interest was that of Miss Evelyn Park, daughter of Mr. and Mrs. George Park of Wellesley Hills to Mr. Robert Maxwell Leland. Mr. and Mrs. Leland are to live at 43 Livermore Road, Wellesley Hills.

Mr. and Mrs. Harris O. Poor of West Newton are just announcing the engagement of their daughter, Miss Louisa Poor, to Mr. Frederick Andrew Parker. Their marriage is to take place in China, where Mr. Parker is employed by the Standard Oil Company of New York.

I noticed recently the award of a Carnegie Hero Fund medal to Frederick

A. Parker who saved a girl from drowning on March 19, 1918, under rather dramatic circumstances. We congratulate you, Fred, on both scores.

Robert R. Litehiser writes: "I wish to let the Class of '19 know that I have changed my work. The 15th of the month I came to Chicago to work in the Railways Bureau of the Portland Cement Association. There is a live organization of Tech men in the Tech Club here and I am enjoying the meetings very much. Luncheons are held every Tuesday noon."

Word has just been received from Allen Addicks, '21, telling of an extremely sad accident which has just happened to one of our beloved classmates. As this is the first news we have had, it comes as a great shock. Gene Smoley recently lost much of his right hand and part of his left in a rolling mill while working for the Aluminum Company at New Kensington, Pa. Gene has always been one of the most popular men in our class and words cannot describe how we feel for him in his present hour of distress. All we can say is that his own cheerful disposition and sane and philosophical view of life will help him bear up under the calamity which has befallen him. We all wish him the best of luck and hope that the reports which have reached us are in some way exaggerated.

We have some rather interesting notes from some of the Course Secretaries and it is with great pleasure that we congratulate these men upon their accomplishments during the summer months.

Course I

SCOTT KEITH, *Secretary*, Brae Burn Inn, Hopedale, Mass.

I am sorry but it will be necessary for me to turn over the Secretarial work of Course I to someone else.

I have been ill for two weeks with the grippe and then was sent out here for field work for an indefinite period. I am now starting the third week here and expect to be here for three or four months anyway, with no time or opportunity to carry on the work.

I am sorry things broke in this way—and wish I might help out.

Course II

L. M. DALTON, *Secretary*, Link Belt Co., 49 Federal St., Boston, Mass.

B. H. Southwick is in the Engineering Department of the General Electric Co., West Lynn. He reports there is a good percentage of Tech men at the West Lynn Works. Recent Tech graduates who desire the moral support of working with other Tech men should head in this direction. *

B. J. Hooper is in engineering work with Haven & Hopkins, Inc., Boston, Industrial Engineers. He is not married.

J. A. Howe is located in the Bond Department of the Old Colony Trust

1919 Continued

Co., of Boston. He is far from the field of engineering. Howe says if you ever want to buy any bonds or get a line on values, look him up.

F. S. Derr is in the Experimental Department of the Bristol Company at Waterbury, Conn. This Company makes scientific recording instruments of all kinds. Derr is to be congratulated on the success of his invention, a device for registering the water level in boilers. The Bristol Co. has placed his invention on the market.

L. M. Dalton is with the Link-Belt Company, makers of conveying machinery. He is in sales work at their Boston office.

E. F. Doten is with F. H. Sheldon & Co., Muskegon, Michigan. Ev, although far from Boston, keeps up a keen interest in everything connected with the Institute, and is always after the latest dope on what is going on.

C. A. Chayne is on the instruction staff at the Institute. Not being married, he has to get along as best he can without the luxury of home-cooked food, and he can usually be found at the Seville Restaurant about six thirty of an evening. The reason that we are so well versed in his habits is that your correspondent is in the same fix.

P. D. Ames is located at the Custom House, New Bedford, Mass., where he presumes inspecting the pretty immigrant girls. Another one of the boys who, like Henry Bloomberg, is far from the field of engineering.

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Andy Deane is in construction work with the W. H. Ellis & Co., of Boston, Contractors.

Course III

WILBUR S. BURBANK, *Secretary*, U. S. Geological Survey, Washington, D. C.

Although I have written to quite a number of the men, I have as yet heard from only one, George Fleming. The addresses of some of the men may be old, but I hope to get in touch with some of them before long. I would like to get the addresses of Martinez and Beeche of Course III.

George Fleming reports that he has nothing further to offer about himself other than has appeared in a recent number of the Review. He reports that he is "still single, chronically broke, and apparently sane and normal." George writes, "Our friend Everit, who was reported cheerfully, more or less we assume, whacking a flea-bitten burro over the wastes of Mexico in search of the elusive mineral, is once more taking up higher culture at the 'Stute.'"—Oscar Mayer is apparently a will-o-the-wisp, but a passing Techite reported seeing him around New York.—Jimmy Reis has vanished into the desert wastes of Arizona and two letters of mine remain unanswered. Doubtless they have not caught up with him.—Bob Lewis is applying, or was, the principles of mining in the butter and egg business in Beantown.

I saw Everit myself last December in Boston, but can add little to the above news. He had been working for the American Smelting and Refining Co. for some time in Mexico. I suspect he is still taking up work at the Geological Department at the 'Stute, but I dropped him a few lines a while ago and have not yet received a reply.

As for myself, in 1920 and 1921 I spent seven months or so in the Republic of Haiti on a general geological and economic survey of the country carried out under the supervision of the U. S. Geological Survey. Since that time I have been working in Washington assisting in the preparation of a report and on other work. Like George, I am still single, etc., etc.

James W. Reis, Jr., Hotel Cornelia, Ajo, Ariz., writes on October 2, as follows:

"Away along last spring I got your letter after it had followed me around all over the country and I have waited before answering it, so that I could tell you where I am located more or less permanently.

"Perhaps you know that I was in Gary in the steel mills for three years after I got out of the 'Stute and Army. Well, I had a breakdown there about two years ago and went to California, where you addressed your letter to me. I went back East from there and had another set-back which put me in the hospital for a while along last November, and when I got out they sent me out to Arizona, where I have been ever since. During these last nine months I have seen most all of the State from the Grand Canyon to Mexico and have seen most of the large mines and smelters in the State. I also put in a month up in the Patagonia Mountains in a small lead-silver camp just looking around it. But loafing around was getting too much for me so I came over to Ajo about three weeks ago and got a job here. Not much of a one, to be sure, as I am down on the leaching tanks merely looking after the circulation of the solution through the tanks, but they are building a new 5,000 ton concentrator here now to treat their sulphide ore and I hope to land something in it when it starts.

"I haven't heard a thing from any of the boys except George Fleming since I left Boston and would appreciate hearing about what any of them are doing."

As I saw none of the boys myself this summer, this is all the news I have to offer. I hope more of them will come out with a little news this winter, as the returns last spring were rather discouraging. I have had a pleasant and profitable summer field season assisting in a geological study of the Bearpaw Mountains, Montana, and expect to be here in Washington at least until next winter.

I hope by time for the next issue to have heard from more of the men.

Course IV

(No Course Secretary appointed)

P. F. Swasey writes as follows: "It seems rather a pity to me, as a member of Course IV, that our course is not represented in The Technology

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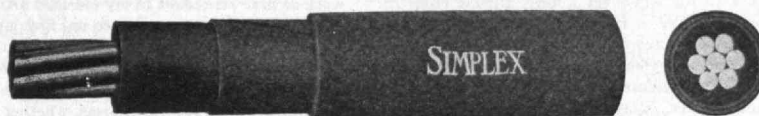
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1919 Continued

Review. I have forgotten, or I did not know, who in our course was appointed to look after the news for that section. There were but few members in our course and we are all greatly interested I believe, in what is going on.

"It may be of interest to you to know that Harold Wells is now the proud father of a daughter, Barbara Leonora. Wells is doing a big business these days selling Fords for the Cambridge Motor Company, Massachusetts Avenue.

"Frank Cohen, always quiet and very busy, is in business with his uncle in Cambridge.

"Stauback is with his father in Newark, N. J., managing the Burroughs Adding Machine Office.

"Francisco Lobus is in that far-off country of Chile, but hopes to return to New York this year. The whereabouts of Ray Deardon has been a question to all of us and of course we would greatly appreciate hearing anything about him.

"As for myself, I am busy trying to look after a family of nearly a hundred boys at The Farm and Trade School, a private school for worthy boys of limited means, as we call it, located on Thompson's Island."

Course V

RICHARD F. CASHIN, *Secretary*, 390 Harvard St., Cambridge, Mass.

Herman Dedichen, the sage of Norway, sent in a letter the latter part of the spring. He briefly sketched his doings since he left the 'Stute. From 1919 to 1920 he was a chemist in a factory near Paris, manufacturing nitric and muriatic acids. In 1920 he left France for Finland, where he served as manager and chief chemist in a gelatin factory. While there he succumbed to cupid's darts and was married. In 1922 he returned to France, where at present he is trying to work a small plant of his own, extracting phosphoric acid from bones and making gelatin from the remainder. Dedichen would like nothing better than to settle down here in the States, so if any of you men happen to come across an opening for an A-1 chemist specializing in gelatin work and speaking French, German, Norwegian, and English fluently, write immediately to his present address at 9 Rue du Bac, Paris VII, France.

After several ineffectual attempts, Frank Hoyt was finally located in Denmark. For two years (1918-1920) he taught physics at Tech and then made a jump to Leland Stanford, where he took his Ph.D. in 1921. This makes him the first 1919 Ph.D. After a year at the University of Wisconsin, he was awarded a National Research Council Fellowship to work in Denmark with Professor Boks. During the summer of 1922 he visited England, France, Germany, and Switzerland and to all intents and purposes, he is living the life of Reilly. His address is Tornegade 50 III, Copenhagen, Denmark.

Dutchy Selfert is with the By-Products Steel Corporation at Weirton, West Virginia. He is in charge of one of their plants. He made a flying trip to Boston the latter part of June to act as best man at Donald MacArdle's wedding. Mac is an '18 man. As this is the third time Dutch has served in this capacity, he is permanently licked as far as matrimony is concerned. (Elinor Glynn's "Three Weeks," page 107.)

Harry Peach, after teaching in the 'high school of Townsend, Mass., last year, is again playing the part of a dapper pedagogue at Topsfield High. He is still living in Malden.

Mariano Lichanco our little Filipino friend, who spent only freshman year with us, wrote in for the address of Ralph Lockwood of Course VII. I wonder if Marshal Balfour can oblige? Lichanco's address is Manila, Philippine Islands.

"Yours truly" had the pleasure recently of spending a week-end with Nuts Nutting at his home in Salem, N. H. He is still very satisfactorily located with the Arlington Mills at Lawrence, Mass. He is already looking forward to September 1941, when his young son is to enroll at the Institute.

Course VII

MARSHALL C. BALFOUR, *Secretary*, 653 Washington St., Quincy, Mass.

Your Course Secretary finds himself at this writing in Virginia, where he is getting a little preliminary experience in making hookworm surveys. He will journey onward next week to Alabama and spend the summer there engaged in surveying selected counties to determine the prevalence of hookworm disease. The International Health Board and the State Boards of Health are conducting the work jointly. I shall return to Boston late in September to return to school and to take up the arduous duties of reading letters from members of Course VII.

The following has been received from Miss Celeste J. Brennan, 1127 South Twelfth Street, Birmingham, Ala., who gives a fine account of her experiences since the days at the 'Stute:

"The first letter came and was thoroughly enjoyed, and really and truly I have planned frequently to write but all my Northern pep has been absorbed and I am very careless and lazy. You have had a most interesting career—a charming wife—a trip to Europe and now at Medical School. You are very wise to go in for an M.D. It will help tremendously. You don't know how avidly I read The Technology Review. I open at once to 'News from the Classes' and read practically all of them. You see when I left Tech in 1918, I went to Penniwan, Virginia, with the duPonts, testing gun powder. After a year or so, the chance came to do laboratory work at White Sulphur Springs, W. Va. That was a most enjoyable experience, lots of

1919 Continued

golf, swimming, and the best saddle horses in the country. I had a wonderful time there, but finally left because the dull seasons were really suffocating! So to Birmingham, Alabama (still going southward) I came. I have charge of the laboratory and X-ray, have two pupil technicians, and wonderful associates as far as coöperation and high standard goes. I have been here two and a half years, and plan to stay indefinitely, unless something awfully good tempts me to New England. Do please get in touch with me this summer. I hope you and Mrs. Balfour will be in Birmingham so you may see my lab. It is actually a show arc, for expense was unspared in its equipment. Have I accounted satisfactorily for my time? Oh! yes! I have an adorable Pekinese dog, he being the chief object of my affection, up to date.

"Thank you so much for writing me a second time, for I really am a most enthusiastic alumna and just shriek with joy whenever I meet anyone from M. I. T.

"Sincere greetings to Mrs. Balfour, and to any of the boys that may recall me. I am looking forward to seeing you both this summer."

Benny Coleman has been a consistent contributor to the 1919 news column. A recent letter has some added news. Coleman has recently severed his connection with the Montclair Water Co., Little Falls, N. J., and is planning to enter business in New York. Course VII will be sorry to see Benny drop from the ranks of public health. He calls public health "the only remaining noble and glorious profession." That is rather rough on the other fellow and we hope to see him back in the fold later on. Coleman was married in May, 1922, to "the best little girl in the world." That was news to the Secretary, at least, and the very best of wishes are extended. They have made their home in Paterson, N. J.

James M. Strang has finished his second year at Harvard Medical School and will spend the summer at home in Auburndale, while taking a summer course.

The Secretary regrets that his notes for the last July number of the Review did not get in for publication. Ray Powers has been resurrected and writes the following from Los Angeles, on July 13: "I am mighty glad to hear all the news. I am still in Government service, but instead of dehydration work in Oregon and Washington, I am now located at Los Angeles. Yes, the same line of work and making progress, too. I see lots of country both by train and machine. Recently I spent several days in the Imperial Valley 200 feet below sea level with the temperature at 120 F. It's not as bad as it sounds, although I'd hate to hang my hat there. I also see lots of good country.

"I have been thinking that a change to a more commercial field would be desirable. If you hear of anything in the food line, I would be glad to

hear about it. Every year until this year I have made a trip to Boston in May or June, but I do not expect to get there this year."

R. S. Hunt keeps us pretty well posted about his activities. Hunt is loyal to 1919, as we would have him be, although he took his degree in Course VII in 1921, having spent a year and a half with the Field Artillery in France. He writes from Swampscott on June 9: "During the year 1921 I assisted Dr. Allan W. Rowe in the Chemistry Department of the Boston University Medical School and since then I have been a teaching fellow at B. U. S. M., teaching half the year and working in the other half year on a research problem as a part of the requirements for my Ph.D. at Tech. This fall I return to Tech as half-time assistant in Course VII and hope to receive my Ph.D. in June, 1924. Except for my studies my other interest is the work as first lieutenant in my old field artillery outfit which I was with during the War, a case of returning to my first love."

The Secretary has no claim to distinction since last heard from. He spent the summer in Alabama making hookworm surveys for the International Health Board. Between trying to solve the idiosyncrasies of a Ford and examining people for hookworms, whether or not they wanted to be examined, he was kept busy. He now leads a quiet life in Quincy, taking physical exercise as a commuter and intellectual exercise as a second-year student at Harvard Medical School."

Course XI

ROGER T. HALL, *Secretary*, 1673 Columbia Road, N. W., Washington, D. C.

Greetings and best wishes of the season. Better change my address, and bring it up to date on your cards. I've been "hanging my hat" in Washington since last March.

The past summer has brought some of the 19'sers of this department closer together, and seems to have widened the gap still more between others. Some of the gang have gone into a seclusion which bids fair to be a lasting one, but we'll dig 'em out before the season is far advanced, if it's at all possible.

We're nearly 100% benedicts now. The latter part of August found Walt Walworth marching down the long, straight aisle to the altar. He picked on the South for his honeymoon trip, and Friend Wife and I had the pleasure of a visit from them; it was a visit a la Walworth, short and snappy, but sweet. But we're hoping to see more of the newlyweds in the near future. Walt is now a schoolmaster in Brookline, and has established a happy home at 11 Olmstead Street, Jamaica Plain, Mass.

Before another month had elapsed, in the middle of September, Laury Gillett took his stand at the altar. He journeyed all the way from St. Augustine, Florida, to Newburyport, his home town, where the big event took place, stopping here between trains only long enough to say hello and lunch. But his professional duties called him back to Dixie, in the midst of all joy, and again we found ourselves fortunately located, so that we could entertain the bridal couple a few hours, before they departed for the prospering South. Laury is a railroad bridge engineer with the Florida East Coast R.R., and has as an office bunkie, an old Course I pal, well known to all XI men. Address L. A. Gillett, 43 Water Street, St. Augustine, Fla. Horton has settled down in his native land, and already has a family—two little Hortons, I'm told.

Les Jackson writes quite regularly, and has promised to trot over from Pittsburgh in his newly-acquired bus-wagon to talk over old times with me. His last letter mentioned a recent trip to Wheeling, W. Va., for the week-end, and I'm suspicious of an attraction down that way. We are in hopes of meeting again in Princeton, on November 10, when the Harvard outfit comes after the Tiger's scalp. Jack still holds his old professional affiliation, and at present is located in Pittsburgh, Pa., in care of the South Pittsburgh Water Company.

Freddy Hewes is our globe-trotter this year. A letter came a few days ago with an Alaska postmark on it; that's Fred. He said that Uncle Sam has kept him busy up there all summer making the annual repairs to the various radio stations on and off the Alaskan coast. He relates a host of interesting experiences up there, but is anxious to return to the States again. As a Navy officer, Fred's tour of duty on the Pacific coast ends next year, and he's praying for a transfer to the Eastern Shores. So are we, Fred, so good-luck and may we welcome you into the fold again before many moons.

Rus Smith is lost somewhere in the whirl and industry of Chicago, but we hope he is safe. And the other members of Course XI, I am at present completely out of touch with, but a little detective work should bring results easily.

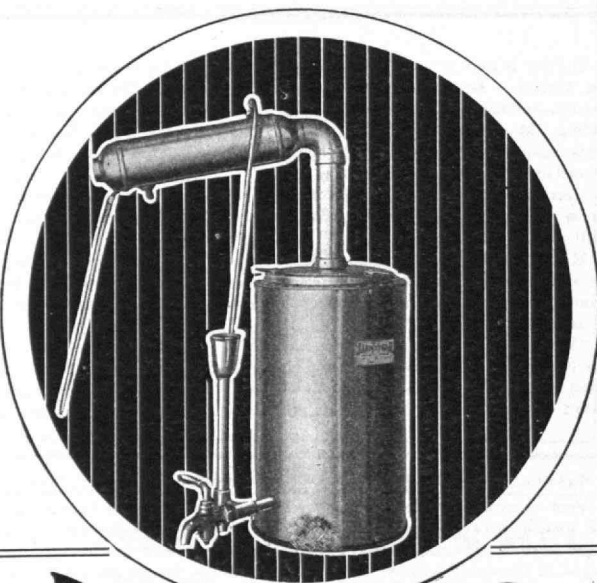
1920

KENNETH F. AKERS, *Secretary*, 54 Dwight St., Brookline, Mass.

Dear Gang: As yet, I have not had time to realize any results from my appeal to you in the last issue of the Review, but I have some small bits of news for contribution this issue.

As per form, we have names of a few of our number who have "gone wrong," through a few mumbled words of a minister. As one man I heard on the train say the other day on seeing a newly married couple enter, "Boy, he's a glutton for punishment!" However, here goes.

Bill Dewey was married on September 4, 1923, to Mary Louise Walker of Evanston, Illinois. Bill expects to still draw his monthly dividend check from the Rising Paper Company of Housatonic, Mass., with which hard cash he will buy the coal and the Saturday night beans.



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1920 Continued

Gavin Taylor was married the week-end before, (September 1) to Miss Ruth Emsley of Methuen, Mass. No further details as to where Mr. and Mrs. Taylor will reside can be learned at the time these notes are written.

Bill Honiss is next in line. Bill stepped off the hard firm ground of bachelorhood onto the rough seas of matrimony on September 29, 1923. Miss Dorothy Roberts of Arlington, Mass., is the girl in the case. I know Rusty, Mrs. Honiss's sister, and if your wife runs true to form, Bill, you are in a class by yourself.

Bill Freeman's engagement to Miss Elizabeth Hodgman, of St. Louis, has been announced. Don't forget us, Bill, when the big day rolls around! So much for the newly crowned benedicts!

Nineteen-twenty has the distinction of having the only woman electrochemical engineer in the United States. Florence Fogler is the woman! Headlines and pictures of her have adorned the papers of late and I am sure 1920 is proud to have her among its numbers.

Course VI and all other 1920 men! Harm Deal has emerged from his den. Behold a copy of part of a letter received from him about two weeks ago. He writes from the E. E. Dept., I. S. C., Ames, Iowa: "I am now a full-fledged school teacher, about the last thing I dreamed would befal me. But really, it isn't at all bad. I am given a free rein to handle my work as I choose, and since the work is new to the college (Ames), it means that I am permitted to develop the college radio station and broadcasting service, as I believe it should be, whether I am right or wrong. Of the many positions I have had since I left M. I. T., I like this best. I am certain, however, that I shall not stay with it more than another year or so."

(Secretary's Note: Harm's letter was in the form of an autobiography of which several carbon copies were sent to his various friends. This explains the ending of his letter, which follows below in due course.)

"My slaving at this typewriter reminds me very forcibly of the night that a gang of us worked and slaved at getting out those 'Eutectic' notes. The typewriter keys are not clicking faster than the clock on the wall. It's a slow job, and truly a labor of love. I am safe in saying that, as not a single copy of this is being sent to a female.

"I haven't the slightest idea of what I want to do after I leave here. I have tried everything from digging with a shovel, excavating for a foundation that later I was permitted to put in, and install the machinery that went on it, to cleaning up a coal-gas plant, rewiring a generator, remodelling an ice plant, working at all the thankless jobs from timekeeper, material man, engineer and assistant to the general manager of a street railway system, as chemist working on a boiler water treating plant, clear down to my present job as pedagogue, and with the rank, (that lowest of mortals) Instructor

in Electrical Engineering. If any of you have any jobs in mind that I could qualify for, and that would serve to round out my engineering experience before I keep my promise to get a job as farm hand, please let me know of it.

"I have completely lost track of a bunch of the fellows. Smitty gave me up in disgust. Ted Saunders was last heard of in a paper mill in the Northwest. Booth, I hear, is working for Dugald. I read the Alumni bulletins assiduously, but I guess that the rest of you fellows are no better at writing to Ken Akers than I am. I do hear from some of the fraternity occasionally, but the accounts are all of the same import.

"Someone who has attended the 'Stute since '20 surely can recognize merit. I have received several cards from the Librarian there who informs me that the bound copy of my thesis has been stolen. He wants me to do it over again. That anyone would find anything in it to make it worth while stealing, is the greatest praise that I have ever received for that brilliant piece of research!

"The history will now be closed. The copies are to be enclosed with a note that will more personally apologize for my negligence in writing to you, to prevent anyone from feeling hurt or jealous, because they received one of the copies of this instead of the original. (You might erroneously infer that my love for you is in the inverse ratio to the number of the copy, as fifth carbon copy, $\frac{1}{5}$ the love, etc.) I am putting your names in a hat and having a disinterested person draw them out. The first name out gets No. 1, etc."

I think Harm Deal's letter is of interest to all of us. If more of you would write me thusly, we would have some notes.

Jasper Green, Al Glassett and Don Mitsch have got together with me as fourth man, for a weekly game of bridge since last summer. We have had some good times. Only one-quarter of a cent a point, so no one is ever cleaned out. Don swears Jasper is his hoodoo partner, and Jasper never raves when we move and he sees Don opposite him. In order that some one might think Jasper and Don poor bridge players, I must add that both of them play a mean hand.

I myself have changed jobs again. I am now located with the Improved Risk Department of the New England Insurance Exchange. This is an insurance rating organization which makes the rates on all sprinklered factories and buildings in New England. The work is very interesting and I find the old slide rule and hydraulics stand me in good stead; in fact, in designing protection and construction for various manufacturing hazards, one uses about every kind of engineering from Civil through Chemical and Electrical.

By the time of the next issue I think many letters should arrive. Here's hoping.

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1921

R. A. ST. LAURENT, *Secretary*, 754 Morton St., Mattapan, Mass.
CAROLE A. CLARKE, *Assistant Secretary*, 528 Riverside Drive, New York, N. Y.

We deeply mourn the loss of our classmate, Jack Grimmons, VI, who, on October 24, was electrocuted in the Glendale Square Station of the Malden & Melrose Electric Company. As electrical engineer for this concern, Jack had progressed up through the ranks, and on this day was instructing a group of engineers in new electrical machinery. In his enthusiasm to explain the workings of the equipment of the sub-station, which has only recently been opened, he approached too close to the high tension lines and 22,000 volts passed through his body. All known means of resuscitation were used for a long period, and it was a sorrowful group that gave up the struggle as impossible.

Jack was born on June 26, 1899, the son of Charles A. Grimmons, former Mayor of Somerville, and was a graduate of Somerville High School. He took active part in the Electrical Engineering Society, was a member of Vectors, and was well known from his participation in the Tech Show in his Sophomore and Junior years. He was a member of the S.A.E. Fraternity. It is with very sincere, deep regret that we learn of this sad news.

1922

ERIC F. HODGINS, *General Secretary*,
Room 3-205, M. I. T.
Course II

J. E. SALLAWAY, *Secretary*, 125 Cushing Ave., Dorchester, Mass.

We herewith open the second volume of notes for 1922-II. Let us hope they will be voluminous. I'll spread them out as much as the gensec will let me, but ship it in, fellows.

I suppose after the romantic summer we can look forward to another crop of engagements, etc. The papers for the past summer have been crowded with announcements of '22 matrimonial activities. To begin with—

Carl W. Shattuck married Eleanor Agnes Brigham on October twentieth in Worcester, Mass.—Harry L. Pearson married Marjorie Brown of West Medford on June sixth.—Edward B. Schwamb married Helen F. Whittier of Arlington Heights, Mass., on June 23; Ed's twin, Ted, "assisted" in the capacity of the better man.—Vincent P. Ring married Jane M. Healy of St. Louis, September eight.—All these announcements are authentic. Congratulations may be sent to any of the above parties without fear of contradiction.

Now for the engagements:

Tommy West has come out in the open and admitted in print that he is engaged to Miss Priscilla Smith of Salem, Mass. I had the pleasure of personally congratulating Tommy when I met him recently in Danielson, Conn. Pete Perkins has confirmed his engagement to Miss Elisabeth Marshall. I met Miss Marshall in New Hampshire last summer and have to admit that Pete is one lucky boy.

The above announcements close the formal section of the notes. All the above statements are facts. The Secretary refuses to assume responsibility for anything appearing below. While in Boston recently I dropped in to see our esteemed gensec. I always like to go over to see him because I always get all the Herbert Tarytons that I can smoke at once. Well, what I wanted to say is that if any of you are within ten miles of Cambridge, I would advise you to go in and see Eric. They say travelling salesmen can tell funny stories, but the editor has a few himself.

Course VI

FEARING PRATT, *Secretary*, 120 Main St., Hingham, Mass.

It has always seemed that summer ended with Labor Day. It was about this time that some of us began to get the trunk out and to think of the 'Stute once again, and especially those condition exams—excepting present company of course. But summer had apparently lingered a little longer this year. Invigorating football weather was not here. Seasonal storms did not fill the reservoirs and according to our morning papers, the situation was rapidly growing worse. Anything might happen. Something did happen. A letter from our gensec told us of the course notes that were due in a few days. Vacation was over, there was no doubt about it.

But Joe Cook did not take a vacation. He has been very active, or perhaps he is more frank than the rest of us—I mean the rest of you. The truth is: Joe is engaged to Miss Helen McCarthy of Arlington. The evidence is in the *Boston Transcript* for September 1. Congratulations, and the best wishes of the course, Joe.

Russ Hubbard has made his appearance in the news again, this time in the rôle of a daddy. A son, Scott Hubbard, was born this summer.

Walking down Oliver Street a few days ago to lunch, we met Roger Walk and Blondy Bloomquist. Both reported a pleasant summer and lots of work for this coming winter. They are with Stone & Webster, Inc.

Tommy Williams is right amongst them now. He is with the traffic department of the New England Telephone and Telegraph Company at Springfield, Mass. There, he is responsible for five or six hundred girls. That's enough to worry any ordinary man, but I know Tommy will thrive on it. He has only recently been transferred there, consequently his new address is not known.

Among those present at all the first night performances of New York's leading "ear and eye" entertainments is one Parke D. Appel. Although having gained the avoirdupois of the prosperous, he still maintains his youth by

1922 Continued

associating with it. When time permits, Parke attends an inductive interference school conducted by the American Telephone and Telegraph Company.

The following is quoted from the *Boston Herald* for June 9:

"The Charles A. Coffin Foundation, created last year by the General Electric Company, announced today the names of seven college graduates who are to receive the Charles A. Coffin fellowships for 1923. The seven men, who were selected from forty-two applicants, include Edward Lawrence Rose of Pasadena, Calif., a graduate of the Massachusetts Institute of Technology.

"Mr. Rose is the son of E. H. Rose of Pasadena, and was born at Colton, Calif., Oct. 13, 1900. In 1919 he entered the Massachusetts Institute of Technology, taking his S.B. and S.M. degrees there. He has since been research assistant in the electrical engineering research department of that institution. He will now do research work at the California Institute of Technology."

And now the circuit breaker on the typewriter trips.

Course VIII and IX

THOMAS H. GILL, *Secretary*, 6 Montague Terrace, Brooklyn, N. Y.

Well, Eight and Niners, how have things been going? Suppose you have all had a pleasant summer and are just effervescing with news. Well, hold it for the February issue and we shall spring it all at once. The following has been scraped up, received without a general call for news, so you will realize that it wasn't any fault of yours.

It appears that Jack Liecny, our famous banjo artist, has been kidnapped. It was accomplished by a Miss Ruth Russell Codman at Pasadena, California, formerly of Boston, and June 28 was the date. They are at home at 48 Massachusetts Avenue and Jack will be pleased to see any of the crowd.

Major W. R. Conolly writes from Fort Leavenworth, Kansas, that he is still a student officer at the General Staff School and expects to be graduated next June.

Well, Eight and Niners, during the next month you all will receive a note of inquiry for news, so be prepared with a red hot story for the crowd.

Course XIII

C. FORD BLANCHARD, *Secretary*, 1040 Plymouth St., Abington, Mass.

The Secretary of this course sent out a jellygraph appeal to some thirty members of this course on August 30 and boasts of six replies. Twenty per cent is very good for a "direct by mail" campaign, advertising authorities advise.

The first reply was from East Milton, Mass. As Gob Marsh says, "Howe is now in the surtax class" being a general building constructor. Just fancy one of our course having in his employ those lordly carpenters and plasterers and bricklayers, who won't even condescend to pick up their tools for less than \$25 per diem. Seriously, he's in the house building business out there and extends a cordial invitation to all the boys at 208 Edgehill Road.

Greenwood's letter must be mentioned next because it is so important. It came engraved on stiff white paper in two envelopes. Beatrice Morse Pratt is the lucky girl; (anyone who marries a Course XIII man is lucky); the 17th of July was the date and 440 Newbury Street is the new address. The official "Best wishes" of the course are, of course, with them.

Gob Marsh's letter is a mine of information. He himself had recently resigned from the General Electric Company. With Gob out and Steinmetz dead we don't see how the General Electric Company will make out, but Gob says that Eddie Morse and Don Warner are still at Lynn. He also says that said company's salaries are inversely proportional to the length of their titles. Do we hear several say "check"?

Charles Chase and Joe Keenan also report from the General Electric Company at Schenectady. Joe is playing with steam turbine development and chasing down entropy like Sir Galahad after the Holy Grail. Charles was engaged in Turbine Construction but according to Joe's more recent letter, he seems to have left the company.

The Secretary was very glad to hear from Don Bixler. There he finds a kindred spirit who is finding it hard to accustom himself to "staying put." Don writes from Quincy and the only thing at Quincy for one of our ilk is the Fore River Plant. He finds life somewhat of a struggle. Guess all hands do, just now. But he's been to South America and Europe and the Great Pacific Coast, which is well worth the time it takes to do it.

Al Bowers was at Harrison, N. J., when last seen. He expected a transfer, but we have not heard that he received it. He still works with Worthington. Shearer and Bernard are rumored to be in New York.

1923

ROBERT E. HENDRIE, *Secretary*, 47 Fairmont St., Cambridge, Mass.

H. L. BOND, *Assistant Secretary*, Room 1-181, M. I. T., Cambridge, Mass.

Most of us have now accumulated another month of experience, engineering or otherwise, since the last issue of the Review, but only a small percentage have let their Secretary know about it. You all turn to the alumni news as soon as the Review reaches your hands and are undoubtedly a bit disappointed at the quantity of 1923 notes. The reason for the shortage, however, is the fact that so few realize that each individual in the class is responsible for his share of the news. Let's have a little team work before our next issue goes to press. Sit down now and write to your Course Secretary, or your Class Secretary. Tell him what you are doing, where and why you



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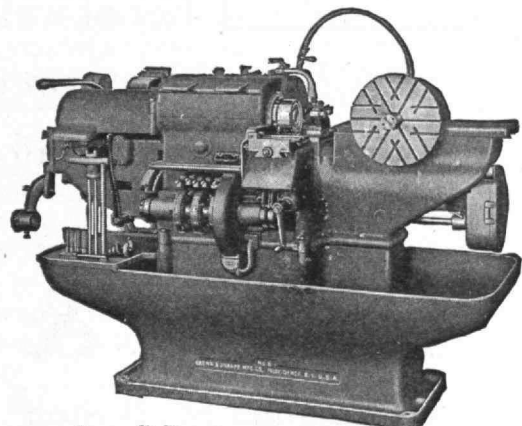
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1923 Continued

are doing it, but please omit any embarrassing details. Tell him also about any other '23 men you know of and let's make our next Review big.

Course I

J. M. ROBBINS, *Secretary*, 42 Oak St., Belmont, Mass.

While very few letters have come in since the last issue, considerable information has reached me from a number of sources, chiefly through Miss Niles, to whom we are most grateful for her interest and coöperation.

Quite a number from the class are helping to keep the telephone system in operation. Bob Hendrie, Gerry Putnam and Hugh Chase are located in Boston with the New England Telephone and Telegraph Co., Kid Heiss is in Washington with the Chesapeake and Potomac Telephone Co., while Herb Leisk and Jeff Hails are with the American Telephone Co. in New York. The service is bad enough now; what it will be when this gang finishes the training course and is let loose on the job gives us much food for thought and cause to sympathize with the long-suffering American public.

Leisk and Kalker are as inseparable as ever. They room together in Newark, where Harry is located with the Hay Foundry and Iron Works.—Red Gilman has left the Illinois Highway Commission and has joined the Coast and Geodetic Survey. He is in San Francisco and when last heard from was determining the direction of the currents in San Francisco Bay.—Allen Parker writes most interestingly from Juneau, Alaska. His work has consisted of drag line operations off the coast and a plane table survey of Port Frederick.

Three of the class, Petersen, McKeen, and McKittrick, are with the Bethlehem Steel Co.—Lier has gone with the Phoenix Bridge Co.—Gasser is with the American Bridge Co.—Freddy Brittain is still with Weston & Sampson and at present is working on a filtration plant at Pawtucket, R. I.—Sailor Dresel has joined the ranks of assistants at the 'Stute.—Niels Lassen is working for the Consumers Power Co. of Jackson, Mich.—Ted Crowley has entered the Grocery business and is now with the Emerson Co. of Boston.

Freddy Almquist, Ed Averell, Unity Chase, Al Crossman, Art Davenport, Leo Poor, Jim Fisher and Al Valentine were awarded their degrees this fall. Freddy can be reached through the Montclair Water Co., of Little Falls, N. J. Art expects to begin with Stone & Webster in a few days.—Arne Ronka, George Pease, and Joe Nowell are already with Stone & Webster, Ronka in Iron Mountain, Mich., and George and Joe in the Boston office. The details of Joe's marriage last summer are still lacking. Though late, our congratulations and best wishes are none the less sincere.—Jim Fisher entered the employ of the United Fruit Co., and was on the S.S. San Gil, bound for the Canal Zone, when that vessel went on a reef recently. Jim's usual good luck was with him.

The Army group are pretty well scattered, with the exception of the Teale-Jones combination. They have managed to keep together most of the time since they left the Point and are now with the Eighth Mounted Engineers in Texas.—Du-Hamel is stationed at Camp Dix, N. J.—Arthur is with the Sixth Engineers at Camp Lewis, Washington.—Kittrell is stationed in Hawaii, while Covell holds sway at the personnel desk in the office of the Chief of Engineers.

Bobby Burns writes from Toronto to say that he is engaged in bridge construction work there. I gathered that he had left the Dwight P. Robinson Co., but he did not say who he is with at present.—Speed Becker is reported to be an instructor at Marquette University.—Mal Naughten left last June to go with the New York Tunnel Commission. Since nothing has been heard to the contrary, we presume that he is still there.—Jim Rooney is employed by the North Jersey Water Power Commission in Newark.—Harry Thompson dropped over to a smoker of the Civil Engineering Society the other evening and reported that he is working for the Massachusetts Department of Public Health.—Charlie Wenz has forsaken the engineering profession, for the time being, at least, and has gone into lumbering. He is in Uesta, Washington, with the Saginaw Timber Co.—Rally Rubins is reported to be with the Illinois Highway Commission.—Charlie Pool, of Course XI, is in Concord, N. H., with the New Hampshire State Board of Health.—Pat Lavery, '22, XI, seems to be looking out for our other sanitary experts, Bill Wise and Fred Almquist. We suggest that he take over the entire bunch as they are all entitled to be classified with '22 and no doubt would prefer to have their careers chronicled by that eminent historian, Francis J. Lavery.

Course II

HAROLD B. GRAY, *Secretary*, 25 Stone St., Cliftondale, Mass.

Elmer Sanborn is with the White Motor Company in Cleveland, Ohio. He dislikes restaurant food, so keeps house for himself in a one-room and kitchenette apartment.

Course III

BENJAMIN P. LANE, *Secretary*, 3 Bond St., Claremont, N. H.

As this is the first news of the miners since their graduation last June, perhaps I can do nothing better than to repeat the answers to a mythical, roll call as they were given to me.

R. F. Abarquez has gone on the Philippine Bureau Service at Manila, P. I.—R. H. Alden is back at Technology this year finishing his course.—S. I. Berger has gone with some concern out around Chicago, but nothing more definite is known. His home address is Naugatuck, Conn.—A. S. Bruna

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1923 Continued

who was with the class up to the Sophomore year, has now re-entered the Institute to complete his course.—Harry Bruner went with the American Metal Company in Mexico and his address is Cia Minera de Pencles, Monterey, N. L., Mexico.—L. F. Buch worked underground in the Scrubs Oaks Mine of the Replogle Steel Co. at Wharton during the summer. (Doubtless this brings back tender memories to some of our readers.) He has now left for Chile and may be reached by mail c/o Chile-American Association, Santiago, Chile.

M. L. Carey took summer school work at the Institute this summer and is now ready for graduation. He lives at his home, 210 High Street, Medford, Mass.—J. R. Elliott went abroad this summer. His permanent address is Plymouth, N. H.—John Flaherty and Charlie Goldstein worked their way across the country early this summer, and are now flotation operators for the Utah Copper Co. (Address: Utah Copper Co., Garfield, Utah, Arthur Dormitory).—Harry Green worked in Connecticut for the Milford Electrolytic Iron Co. during the summer, but is now an assistant in the Mining Department of the Institute.—L. S. Hayes went to either Utah or Nevada to work. Letters will be forwarded to him if addressed c/o his cousin, Michael Fahey, Ames, Wardwell & Ives, 84 State Street, Boston.—Eddie Heap was going with the Norfolk Varnish Co. His address is 132 Atlantic Street, Atlantic, Mass.—F. A. Hooper worked in the mines in Utah this summer and is now back at the Institute.—Frank Knight planned to go with the Iron Cap Copper Co. at Globe, Arizona, but mail should be addressed to him at Manchester, Mass.—N. A. MacNeil went with the Milford Electrolytic Iron Co. at Milford, Conn.—R. M. Meekins took the "loop" course with the Bethlehem Steel Co. Mail will be forwarded to him from 162 Rhinecliff Street, Arlington Heights, Mass.

S. B. Metcalf has gone into oil with the Atlantic Oil Co., Box 327, McNeil, Arkansas.—W. S. Niekamp was going with the Eagle Pitcher Lead Co. in southwestern Missouri. (Address: 7104 Delmar Boulevard, University City, Mo.).—P. R. Pearson went with the Bridgeport Brass Co., and is living at 82 Stratfield Road, Bridgeport, Conn.—E. R. Richards joined the Illinois Steel Co. Mail will be forwarded from 32 Hancock Street, Lexington, Mass.—P. M. Stearns went abroad this summer and planned to return to the Harvard Business School this fall. His home address is 266 Main Street, Wakefield, Mass.—J. W. W. Sullivan worked this summer for the Milford Electrolytic Iron Co., but is now selling for the Loudon Machinery Co., 1106 Old South Bldg., Boston, Mass.—A. F. Taylor is mining zinc in Joplin, Mo. (Address: c/o T. F. Lennan, Joplin, Mo.).—T. M. Taylor expected to go with the Eastman Kodak Co. Mail will be forwarded from his home 324 West Magnolia Avenue, San Antonio, Texas.—D. G. B. Thompson is another one who went abroad this summer. He is now back at the Institute.—N. L. Weiss is an instructor in mining and ore dressing at Penn State, State College, Pa.—W. Wolf did not complete his course last year and is back at the Institute this year.—M. F. Yarotsky is in the iron and steel game and is living at 716 Somerset Street, Johnstown, Pa.

As for myself, I spent the summer in New Hampshire, but inside the factory of the Sullivan Machinery Co. I have hopes of being sent out into the sales department shortly.

Course IV

JAMES A. HENDERSON, *Secretary*, 856 No. Lockwood Ave., Chicago, Ill.

L. J. Tracy is located in Boston with Stone & Webster.—Stan Davidson seems to have the jump on the rest of the course. On the eleventh of October he was married to Miss Ruth E. Files of Watertown. Congratulations, Stan.

Course VI

ALBERT J. PYLE, *Secretary*, 110 West 30th St., Wilmington, Del.

THOMAS E. ROUNDS, *Assistant Secretary*, 309 West 8th St., Erie, Pa.

Most everyone seems to be waiting until they are made chief consulting engineers before they let their Course Secretary know what they are doing. However, we have corralled a few thriving young electricals and here they are.

George Bricker is undoubtedly now spending some time at the Howard Business School and Wheelocks. We wish him luck. This of course may be subject to corrections, as we have not heard from him since the first of September.

Hank Harrington and Elton Willis, who are with General Electric at Schenectady, are assembling panels in the switchboard department. They are located on Jay Street in that city across from the Police Station and over an undertaker's establishment. They seem to be conveniently located to the two greatest necessities of life. When last seen by Tom Rounds who gave up the Schenectady job for Erie, Hank was just taking a bite of good old B. L.

Al Pyle left Schenectady about the middle of August on leave of absence. Since then he has decided to become a Mormon and has accepted a position with the Utah Light & Power Co. Al says that he gets his living quarters thrown in with his salary and could have a whole house if he were married. We are all in favor, Al, go to it!

E. C. Brown was put on some special test work at Schenectady and when last seen was pushing a truck load of insulators, probably in the general direction of Building 23.

Tom Rounds has been transferred to Erie on Railway Test after having spent two weeks helping Hank Harrington and Elton Willis tighten nuts in Schenectady. The locomotives for the P. & O. Railway of France recently hit 99 miles an hour on the test tracks at the Erie Plant. This is only slightly more than the rated maximum speed contracted for. They say Erie is cold

THE DISADVANTAGE OF POOR LIGHTING.

As thousands of our industrial plants are operating to-day with poor lighting and in some cases with extremely bad facilities, it would seem that the importance of the subject of lighting has not been given the serious consideration by those responsible for such conditions.

Poor lighting is one of the most serious handicaps under which a manufacturing establishment can operate. First of all, poor lighting is the cause of a large number of accidents in industrial plants; and it is singular that accident reports do not yet properly classify the hazards of poor lighting, which in many cases is the primary cause of an accident attributed to what is really a secondary cause. Safety engineers and other officials who make accident reports should always consider the condition of the lighting when working up a report of accident causes, for it plays an important part in a great many casualties and is apt to be overlooked. All accidents due to poor lighting are accidents of neglect, and are preventable. The poor lighting accident hazard is clearly chargeable to management and not men. It is a difficult matter to make such progress with Safety First in a plant which has neglected to provide one of the fundamental requirements of accident prevention—good lighting.

Probably no one single factor connected with the equipment of a plant so directly affects the efficiency and inefficiency as the quality and quantity of the lighting. The curtailment of production of all working under the disadvantage of poor lighting represents a big loss each day; the poorer the lighting the less able is the working force to function efficiently. Quality and quantity both suffer, representing a preventable loss wholly removable by improving the lighting.

Under poor lighting condition, we cannot expect and rarely do we find an orderly, clean factory. Darkened places encourage careless habits and workers are often led to deposit discarded articles or material which should be deposited elsewhere. The eyesight of those who attempt to use their eyes continually in insufficient light, below nature's demands, is often affected. Too much light, such as is furnished by bright, unprotected lights, is as harmful as too little illumination; both are fundamentally wrong. Nature's own illuminant, daylight, is unequalled for our requirements of lighting.

The eye is best suited to daylight in the proper quantity. Sun glare should be avoided, and in the darkened hours proper artificial illumination provided. Daylight should be utilized to the fullest extent. It is supplied free in abundant quantity for our use. Modern invention has supplied a means whereby the interior of buildings can be lighted by daylight, and all the advantages secured which is furnished by good lighting at the smallest cost.

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1923 Continued

as the infernal regions in winter, being situated on the lake of that name, but Elt says he hardly gets the comparison so far.

Course VII

EARLE A. GRISWOLD, *Secretary*, Griswoldville, Mass.

Milt Parker is with the Heathized Butter Co. of Baltimore acting as technical expert in their process. He has been jumping all over the country and was about to leave on a trip to the Pacific coast when he contracted typhoid fever at Atlantic City and is now home convalescing. The last news from him was favorable and I expect he will be around in a few weeks.

Bernie Proctor will be at B. U. Medical for the next two years on a scholarship which he was awarded. He then expects to spend another year at Tech and get his Ph.D.

Phil Riley has been employed by the State of New Hampshire this summer making a sanitary survey of certain lakes and streams which are primarily summer resorts. He is now back at Tech as an assistant instructor.

Tom Duffield is with the Health Section, League of Nations, Geneva, Switzerland. The last we heard from Tom he was just leaving on a trip which would take him to all of the European Capitals. Haven't heard a word

from Smoke Fuller or from Swett, so I suppose they are so busy they have no time to write.

Miss Antoinette Guisen has gone to Belgium as an interpreter for the American Child Health Association. Miss Guisen's home is in Belgium, where she taught school before coming to the Institute.

Ray Willis is situated with the New England Telephone and Telegraph Company. He spent the summer learning the telephone business at the company's expense.

Robert Park is in Sweden doing Hydro Electric work on the scholarship he qualified for. Bob and his wife apparently find it good living in Sweden, as they say the people work part of the day and play all night. This news was received in June.

"Personally, I am with the White Tar Co. of New Jersey, and like the work very much. Their chief operations are the refining of naphthalene and manufacture of disinfectants. Am spending two nights a week at Columbia. Met Parker at Atlantic City for a week-end some time ago and we spent a lot of odd minutes talking over old times."

Course X

RODOLPHUS K. TURNER, *Secretary*, 61 Brookline St., Chestnut Hill, Mass.

Charlie Rhodes, who is an assistant at the 'Stute this year, kindly dug up the following information about Course X men at the urgent request of the gencec:

Frosty Harmon is with the United States Steel Corporation. He is

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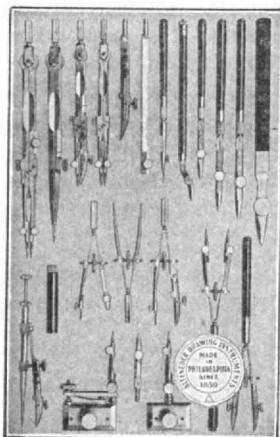
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1923 Continued

located at one of their subsidiary plants, the National Tube Company, in charge of the writing of their textbooks. He is now dealing with the subject of corrosion.

Bill Noyes is connected with the Harris-Forbes Company.—Charlie Oon liked Boston so well that he has decided to stay here and is working with the Boston Woven Hose.—L. S. Champion is with the Standard Oil Company.—Anderson and MacDonald make a strong team working for the Missisquoi Lime Company at St. Albans, Vt.—Down in Bloomfield, N. J., H. A. Connor is doing his stuff for the Westinghouse Lamp Company.—B. Landry is at the Bureau of Mines in Washington.—Guerrieri is helping keep the world full of color at the National Aniline Company in Buffalo.

It is with deepest regret that we chronicle the fact that, due to an auto accident in Bangor, Maine, this summer, the class has lost Silverman.

The following members of Course X-A are known to be located at Boston, Bangor or Buffalo: Abrahams, Belyea, Brill, Burhart, Carpenter, Cochrane, Davis, Drew, Eiffe, Entwistle, Freeman, Gladding, Hampton, Hersey, Hosig, Holden, Houston, Keen, Kellar, Leary, Lovell, Miller, Ramseyer, Sayler, Schoeffel, Schweitzer, Schanklin, Squibb, Turner, R. K., Turner, P. S., Vivian, and Wilson.

Course XII and XIII

CLARENCE H. CHAISSON, *Secretary*, 57 Evergreen St., Auburndale, Mass.

Among the fall weddings was that of Palmer C. Putnam to Miss Theresa Perkins, who graduated from Vassar last June. The event took place on October 6. Joe Nowell was the best man.

The Naval Archs seem to be very quiet. Whether they are all busy building a new navy or still looking for a shipbuilding job is not yet determined.

Nevertheless, your Course Secretary wants to hear from you. The following are all that have as yet been discovered.

Alf Bjerknes was seen wandering through the corridors of the 'Stute with some books under his arm just the same as last year.

W. N. Webster has disappeared, temporarily at least, of finding a marine job and is now with the N. E. Telephone and Telegraph Co. in Boston. Web has just completed a telephone training course and is now in the Engineering Department of the company.

Clar Chaisson is now at the Lawley Shipyards in Neponset.

Archie Williams, and P. D. Fuller, when last seen, were at the Fore River yards.

Last September, the engagement of Lieutenant William Webster to Miss Eleanore Blodgett, of Framingham, was announced.

Course XIV

FRANK M. GENTRY, *Secretary*, 428 Fayette Park, Lexington, Ky.

Now that summer is over and those "melancholy days" are come and there is a mysterious absence of those salmon-colored cards, along comes a letter from Bob Shaw followed by one from Bob Hendrie seeking tidings of the old gang. As far as your Course Secretary can ascertain after much deep meditation and labored use of a rusty slip-stick, the whole outfit has become a geographically disperse and an inert system, judging from the correspondence. It is presumed that most of our make-up has been assimilated in the industries of the country and after three months of hard work now occupy high positions in their professions. But such a timid bunch as we never divulge such mere trifles as corporate directors, honorary fellows, etc., to which we might have been elected.

Addresses Wanted

Mail has been returned to the Alumni Office from the address given below for the following Former Students. Information is desired concerning them, that they may be kept on the mailing list.

ARTHUR T. HOPKINS, '97

Secretary of the Alumni Association.

JOSEPH D. SAWYER, '71, 8 West 78th St., New York City.
 WILLIAM B. FULLER, '83, R. F. D. Route B, Box 137, San Antonio, Texas.
 WILSON H. LOW, '86, 532 South Lorain Blvd., Los Angeles, Cal.
 VERNOR F. WORCESTER, '86, Brock House, Rutland, Vt.
 WALTER C. CADY, '87, 69 Griggs Road, Brookline, Mass.
 H. N. HOUGHTON, '87, 11 Manchester Road, Brookline, Mass.
 ARTHUR B. FRIZELL, '88, 422 Columbus Ave., Boston, Mass.
 ALEXANDER S. EWEN, '89, Colorado Mine Wrecking and Construction Co., Denver, Colo.
 WILLIAM P. FLINT, '90, Lakehurst Proving Ground, Lakehurst, N. J.
 ROBERT S. BURBANK, '93, Red River Lumber Co., Westwood, Cal.
 FREDERIC M. NOA, '94, Estancia, New Mexico.
 HAROLD G. FITZ, '95, 140 West 57th St., New York City.
 JOHN W. HENKELMEN, '95, 2304 Eutaw Place, Baltimore, Md.
 STANLEY A. MANSFIELD, '97, 5 Short St., Melrose, Mass.
 A. E. ROBINSON, '97, 108 South La Salle St., Chicago, Ill.
 ALFRED L. BARRETT, '98, B. & C. Machinery Co., Hayward, Cal.
 JOSEPH J. MOES, '98, 815 C St., N. W., Washington, D. C.
 OLGA C. LEARY, '99, Cushing Hospital, Parker Hill Ave., Roxbury, Mass.
 JAMES D. MACBRIDE, '99, 76 Hillside Ave., Arlington Heights, Mass.
 EDWARD W. SIBLEY, '99, c/o Rand Co., Inc., North Tonawanda, N. Y.
 HARRY T. SHAPLEY, '00, 1236 Beacon St., Brookline, Mass.
 FREDERICK J. DULUDE, '01, 121 North Terrace Ave., Mt. Vernon, N. Y.
 G. EDWARD GUSTAFSON, '01, 1213 Eddy St., Chicago, Ill.
 JAMES M. HAMILTON, '01, 3922 Prospect Ave., Cleveland, Ohio.
 THEODORE F. LANGE, '01, 135 Firglade Ave., Springfield, Mass.
 JEROME E. STEEVER, '02, 51 Board of Trade, Chicago, Ill.
 FRANK G. BABCOCK, '03, Post Office Box 606, New Haven, Conn.
 JOHN W. CROSBY, '03, 33 Whiting St., Boston, Mass.
 EUGENE D. FORBES, '03, 9 Prospect Place, Red Banks, N. J.
 STEPHEN L. BRADLEY, '04, c/o Pressed Steel Car Co., McKees Rocks, Pa.
 ALFRED W. BURNHAM, '04, 8 Grafton St., Worcester, Mass.
 GEORGE N. WHEAT, '04, 4922 Montgale Ave., Kansas City, Mo.
 EDWARD L. DAVIS, '05, 1679 Massachusetts Ave., Cambridge, Mass.
 CHARLES R. BURLEIGH, '06, Knickerbocker Bldg., New York City.
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 HOWARD W. KEY, '06, Russell Mfg. Co., 60 South Forsyth St., Atlanta, Ga.
 SAMUEL SEAVER, '06, 505 Lumsden Bldg., Toronto, Ontario.
 RALPH C. THAYER, '06, 10 Hamilton St., Dorchester, Mass.
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 NAHUM C. WILLEY, '06, 607 Securities Bldg., Seattle, Wash.
 ABRAHAM H. GINZBERG, '09, 595 Massachusetts Ave., Cambridge, Mass.
 KEVORK MADENIGIAN, '09, 409 Eighth St., West New York, N. J.
 LINCOLN R. SOULE, '09, 818 Land Title Bldg., Philadelphia, Pa.
 LUTHER DAVIS, '10, 53 Beaumont St., Dorchester, Mass.
 MYRON K. SWEET, '10, 981 Lexington Ave., New York, N. Y.
 LEONARD M. LUSKY, '10, 1123 1/2 Walnut Ave., N. E., Canton, Ohio.
 LEWIS L. BAXTER, '11, Hedden Conslt. Co., Metropolitan Bldg., New York City.
 ARNOLD C. DAVIES, '11, 8930 Kimberly Court, Detroit, Mich.
 SIMON NATH, '11, 2 Elm St., Methuen, Mass.
 WILLSON Y. STAMPER, JR., '11, Julian Hotel, Corvallis, Oregon.
 HAROLD C. MABBOTT, '12, Aberdeen Proving Ground, Md.
 STUART C. SARGENT, '12, Baltimore Shipbuilding & Dry Dock Co., Baltimore, Md.
 FULTON Q. C. GARDNER, '13, The Farnboro, Florida Ave., Washington, D. C.
 MORRIS F. HALL, '13, Midvale Hotel, Coatesville, Pa.
 RALPH S. RANKIN, '13, 322 Ellicott St., Buffalo, N. Y.
 ALDEN K. BOOR, '14, 35 Norfolk St., Roslindale, Mass.
 EARL H. CUMMINS, '14, Storm Lake, Ia.
 ABNER DOBLE, '14, 808 Marquette Bldg., Detroit, Mich.
 FRANCIS P. GILBERT, '14, 17 Stuyvesant Ave., Lyndhurst, N. J.
 PERCY McCULLOUGH, '14, 4007 Magnolia St., St. Louis, Mo.
 ROSLYN S. MARTIN, '14, 215 Newbury St., Boston, Mass.
 HERBERT W. ANDERSON, '15, 205 Lincoln St., Boston, Mass.
 SAMUEL BERKOWITZ, '15, 17 Grove St., Boston, Mass.
 RUSH B. CADY, '15, Holt, Arizona.
 SCHUYLER COFFIN, '15, 150 Brooks St., West Medford, Mass.
 JAY COOEN, '15, 149 Beach 139th St., Belle Harbor, Long Island, N. Y.
 FRANK W. HALL, '15, 18 Poinciana, Avondale, Cincinnati, Ohio.
 RALPH HART, '15, 286 Summer Ave., Newark, N. J.
 WAI PO LOO, '15, American Trading Co., Shanghai, China.
 LORIN G. MILLER, '15, Ankeny, Iowa.
 JAMES E. MULLANEY, '15, 11 Beacon St., Somerville, Mass.
 ELDRED M. PETERSON, '15, 83 Hunnewell Ave., Brighton, Mass.
 RALPH W. REYNOLDS, '15, 66 West 69th St., New York City.
 H. H. WELLS, '15, 2515 Second Ave., Los Angeles, Cal.
 CHARLES A. AHRENS, '16, 2351 Whittemore Place, St. Louis, Mo.
 EDWARD H. BARRY, '16, 106 St. James Place, Buffalo, N. Y.
 HORACE L. BICKFORD, '16, c/o Clinton Mfg. Co., 83 Grand Ave., Brooklyn, N. Y.
 JOSEPH R. DUGGAN, '16, Bethlehem Shipbuilding Corp., Bethlehem, Pa.
 ALEXANDER KLEMIN, '16, College Point, Long Island, N. Y.
 ALFONSE E. MARQUEZ, '16, Culebra, Porto Rico.
 EDWARD B. SEBBEN, '16, P. O. Box 541, San Francisco, Cal.
 ALBERT SIMMONS, '16, 181 Congress St., Boston, Mass.
 GEORGE H. T. WASHBURN, '16, Room 5, Beard Bldg., Wilson & Bassett Sts., Eastland, Texas.
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 GEORGE P. SULLIVAN, '17, Lewiston, Idaho.
 WILLIAM E. THRASHER, '17, Box 217, Wilson, N. C.

1923 Continued

There is one member of our course who speedily and silently does things. I have before me an engraved announcement: "Mrs. James H. Curry announces the marriage of her daughter, Terese Jane, to Mr. Charles Huesmann Ducote on Saturday, June thirtieth, at St. Cecelia's Church, Boston, Mass." Course Fourteen wishes you, Duke, the best of everything and we all send our heartiest congratulations.

Howard Cobb planned to leave Boston and stroll over to San Francisco on June 15. He had reached Put In Bay, Ohio, on the 27th, having come by way of Cleveland. He found Dave Joy working for the National Carbon Co. in Cleveland. Judging from the dirt that Howard saw there, Dave must be running Mr. Google's jockey a close second. One month later, H. L. had hoofed to Boulder, Colo., where he paused long enough to write a letter and inclose the report of the U. S. Weather Bureau, giving climatic averages. Guess this was supposed to cool off the Kentucky summer. He says "a bum's life is the life," but all I've got to say he'd better not be handing out that line around the 'Stute. Nothing has been heard of him ever after.

Speaking of Dave, he has gone and gotten himself into print. He dignified our course by presenting an extract of his thesis in collaboration with Dr. Knobel at the meeting of the American Electrochemical Society in Dayton during September. The preprint was issued in July for discussion before publication in the transactions of the society. It is a good start, Dave, and we hope you will keep it up.

Charlie Mongan has been in California. He didn't say what for, but of course when we speak of Charlies and California we usually think of movies. He said he attended a meeting of the alumni in San Francisco and I hope this will be a good example to the rest of us.

Professor Goodwin dropped a postal from Yellowstone National Park, where he said he was having a fine summer. Write to him, fellows, for he said he "was glad to get your letter and the news from the boys." I am sure that all of us are sorry to read the item in *Science* that Dr. Knobel was leaving the Institute to go to the University of California.

Little old New York has become the personal abode of Ed Smith. To go back some ten or fifteen years a la mode of H. G. Wells, according to him, he is a physicist, an authority on acoustics, for the Radio Corporation of America. Anyone who could laugh as loud as Ed ought to know all about the reflection and transmission of sound. But it all goes to testify that no one but a Course XIV man could study one thing and make a living at another. His address is 470 E. 161st Street, Y. M. C. A., New York City.

Jonny Sands is working for the International Nickel Co. at Huntington, W. Va. He lives at 311 Water Street. He has risen above the ranks and now rolls nickels instead of pennies. Officially speaking, he is on the research staff. The job, he says, is principally reading pyrometers, the rest of the time he does mainly what he is told to do.

John Little went South for a visit after commencement. He is working for the Johns-Manville Co., Waukegan, Ill.

Information concerning the other members of the course in their pursuit of happiness is lacking. In July your Course Secretary forwarded a letter to every member of the course in the hope of arousing cooperation in gathering news from our classmates. Now that the permanent organization of the class has been effected, you are urged to take part in the interests of your course, the activities of your class, and, above all, in the support of your Alma Mater. Join the Alumni Association if you have not already done so, and read your Review regularly, so that you can keep in touch with your friends. Your Secretary will be glad to hear from you whenever you will write.

Course XV

EDMUND H. MILLER, *Secretary*, 547 Lake Ave., Rochester, N. Y.

Ed wrote Hendrie from Rochester as follows under date of October 5: "The enclosed reply is on the surface, a somewhat sluggish response to your plea for news, but in considering the competition in the demand for time, of work of a nature not to be put off, it really is soon."

"Bill Vicinus, of Gym team fame, is here in the city, doing contracting work, and has done so well that he plans on being married on the 24th of December. Lord help our city politics. There is quite a flock of Tech men here in Rochester, but none of the Fifteneer bunch have done anything quite as desperate as Bill. Hall Kirkham is Assistant Foreman in the spectacle department of Bausch and Lomb. He and Mat Taylor are living together. Mat is in the Industrial Efficiency department at Kodak Park."

"I have just started working at Eastman Kodak office in the Distribution Department with Gus Oddlafsen, 22, VI, and Ken Cunningham, 22, II, who by the way was married this summer.—Sid Walton is working in the manufacturing department here as assistant to Dr. Chapman who is assistant to Mr. Lovejoy, the head of all the manufacturing.—Ted Bastian, Course II, is doing production work at Bastian Bros., manufacturing jewelers.—Walt Metcalf is working in New York City."

"The Rochester Tech Club is holding its annual picnic tomorrow, and if the number of Tech men in Rochester is any criterion, there ought to be a mob turned out."

"Mal Beattie is in Providence.—Fritz Clement in San Francisco.—Jerry Nauman is roaming the South Seas, last heard from in Tahiti, and Bernie Coleman is in the tire business in Poplar Bluffs, Missouri.—Pres Woodling is accounting down in New York.—Doc Randolph, when last heard of, was headed for the Bell Telephone Co. of Pa.—Waldo Fox, the human fly, is helping to run a Public Service Company in New Jersey, and Art Smith is trying to learn something about the A. D. Smith Woodworking Co. in Philadelphia."

Classified Advertising

Mail may be addressed to a Box Number in care of this magazine and will be promptly forwarded to the Advertiser. Other than this, the Review assumes no obligation. Such address counts as five words.

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A LARGE manufacturer of glass containers, located in the Middle West, is anxious to get in touch with Mechanical and Chemical Engineers who have been graduated from five to ten years, for positions in a growing industry. For men of promise who are not afraid to work there is a splendid opportunity with this concern. Address TECHNOLOGY REVIEW, Box 3048.

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ASSOCIATE professor of metallography, ferrous metallurgy and electro-metallurgy, is wanted for a southwestern university. This position calls for a high grade research man who is already a recognized authority on these subjects, or who gives promise of becoming such an authority. A large part of the work will be research and the teaching will be done almost entirely with graduate students. Should be more or less familiar with non-ferrous metallurgy as well. Address TECHNOLOGY REVIEW, Box 3044.

A VERY excellent opportunity is offered to young graduate in the production department of a small but highly successful manufacturing business in the vicinity of New York City. Successful candidate should expect to start at a nominal salary, probably as draftsman; learn all the details of production, and work into being assistant to the superintendent. This position presents a good future to the right man, who is willing to work. Address TECHNOLOGY REVIEW, Box 3041.

A YOUNG chemist who has had experience in the standardization and matching of dyestuffs is wanted to fill a position with a well known firm of manufacturers and importers. Applicants should give full details of experience. Address TECHNOLOGY REVIEW, Box 3049.

EXCELLENT opportunity for young graduate who has had some sales research work and who is experienced in marketing, to act as a secretary in the office of a well known firm of silk manufacturers. Candidate should make a specially good appearance; have a taste for fine fabrics; have a working knowledge of French; be a rapid stenographer; and be able to summarize the essential parts of an address. Man who is single and of the Latin type is preferred. Salary depends upon experience and qualifications. No applications are wanted from men who do not feel confident that they can satisfy the above specifications. Address TECHNOLOGY REVIEW, Box 3046.

SAFETY engineers wanted. Men who graduated from one to three years ago, preferably from the Civil Engineering course, who would be interested in positions as engineering inspectors for a fire insurance company. Location in the Middle West. Salary to start \$1,600 to \$1,800 a year, depending on experience. Address TECHNOLOGY REVIEW, Box 3042.

SALES Engineer with about five years' experience is wanted to take charge of the Boston sales office of a company dealing in heat insulation and filtration material. Splendid opportunity for a man who is willing to work hard enough to continue the excellent record made by the man who is leaving this position to take one involving greater responsibility in the same company. Articles to be handled are high grade in every respect. Address TECHNOLOGY REVIEW, Box 3045.

YOUNG graduate with aptitude for mathematics and with first-class eyesight is wanted to take charge of a photometric laboratory in the vicinity of Boston. Executive personality is desirable. Should have graduated from Electrical or Mechanical Engineering course. Address TECHNOLOGY REVIEW Box 3043.

YOUNG graduates who wish to enter the paper industry are offered a course of practical training embracing all departments of the manufacturing process and leading to positions of responsibility with a paper company in western New York State. These positions would be suitable for graduates of the Chemical and Mechanical Courses. Address TECHNOLOGY REVIEW, Box 3047.

1923 Continued

"Ken Kingsley took a trip through the Canadian Rockies this summer, and speaking of California, Bill Stewart and his wife had a very gay time, sporting about Europe.

"Since most of this news is hearsay, it may not be entirely modern or authentic, but to some extent it will give an idea of a few doings of the corporation magnates"

The Assistant General Secretary has supplied the following additional dope relative to Fifteeners:

But little correspondence has been received from the men who left Cambridge in June, but we are passing along what little is known as to the where-

Positions Wanted

ENGINEERING Accountant, Technology graduate in Civil Engineering, 1912, wishes position as assistant auditor or cost accountant with firm of contractors or engineers engaged in railroad, highway, dam or similar construction. Several years' experience in field and office on railroad construction and valuation, including three on analyses of building, grading, and track costs. Graduate in Accountancy from a recognized school. At present in accounting department of an automobile manufacturing company, broadening accounting experience and preparing for Illinois C. P. A. examination. Thoroughly familiar with French language and would consider locating abroad as well as in the States. Desires to change connections in order to make full use of training and experience in the two professions rather than in accountancy alone. Address TECHNOLOGY REVIEW, Box 2053.

GRADUATE with over twenty years' experience in mechanical and automotive engineering combined with executive duties is available for a connection as general manager of a moderate sized business, preferably in the metal or automotive line. Thoroughly competent to direct manufacturing and sales and can show a successful record of eight years as a general manager. Address TECHNOLOGY REVIEW, Box 4009.

MECHANICAL Engineer with ten years' experience, at present engaged as chief mechanical engineer for a very large New England manufacturing concern, is desirous of finding an opportunity for increased responsibility and consequent earning power. Can show first-class record, having been with the same firm since graduation. Address TECHNOLOGY REVIEW, Box 4003.

NINETEEN HUNDRED AND NINE graduate with a broad engineering and administrative experience in seeking a permanent connection as an executive in a well-established manufacturing business. Can furnish exceptional references and is willing to locate in any part of the United States. Unless opportunity offered is very exceptional, \$500 per month will be the minimum salary considered. Address TECHNOLOGY REVIEW, Box 4007.

PLANT Manager or Executive—Technology graduate in Mechanical Engineering with twelve years' experience in operation of large machine shop with grey iron foundry on light and medium quantity and quality work desires change. Thoroughly conversant with all branches of plant management, including engineering, purchasing, production, power generation, maintenance, insurance, etc. At present employed. Address TECHNOLOGY REVIEW, Box 2052.

abouts of certain members. Ed Miller would sure appreciate a note from any of the crowd, for he was rather shoved into the job of Secretary of Course XV when the class officers decreed that the former incumbent should assist the gensec, and has consequently not had time to write to any of you.

Bill Bigger is with the Midwest Steel and Supply Company in New York.—Harold Bjerke went back to Norway to take charge of his father's planing mills there after a few years' experience in the mills themselves.

Carville was to start with the Newark Public Service Corporation last July, but at the date of writing has not been heard from. Chapin is taking the fourteen-month apprentice course at the Duquesne Light Company plant in Pittsburgh. E. H. Cleudenin went to work with the Illinois Stoker Company at Alton, Ill., last summer and is learning the factory end of it at present, with the idea of later being able to work on some of their production problems.

Tacks Cronin is with the Kokomo Brass Works at Kokomo, Ill., and H. G. Crowley is working for Walworth, here in Boston, we think.—Cub Hubbard (He is properly a Course IX-B man but specialized in XV subjects so is really one of the gang) went early in July with the Underwriters Bureau of the Middle and Southern States, whose office is in New York City.—Bob Hull is one of those who found a job near at hand—he is working in the sales division of the Crew Levick Oil Company at Kendall Square, Cambridge.

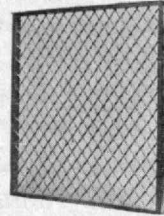
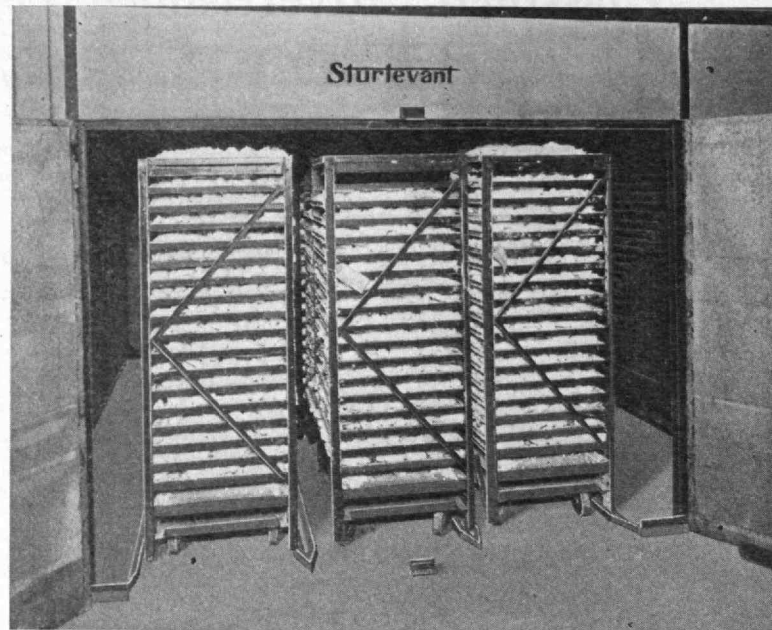
George Ludlow found an opening as assistant to the Vice President in charge of sales of the Sanitary Scale Company of Chicago.—Jerry Nauman is back from the south seas according to latest advice from the coast, and intends to settle down as soon as he can shake off the tropical languor.—Rodney Rankin landed just where he wanted to be, in some steel works near Cleveland, his home burg.—Harry Raphael of Option 1 went with the J. E. Moss Iron Works of Wheeling, W. Va.—Al Redway has gone into work with the Old Colony Envelope Company of Westfield, Mass.—George Riegel spent the summer studying at the University of Chicago, but when last heard from he had no definite plans for this year.

George Southard entered the Harvard Law School this fall. George says there is nothing like it. You pore over abstruse cases for a whole year before they give you a chance to take an exam, and then are so uncharitable as to flunk at least 25% of the class. After four years at Tech, the prospect of only one set of exams a year is not terrible.

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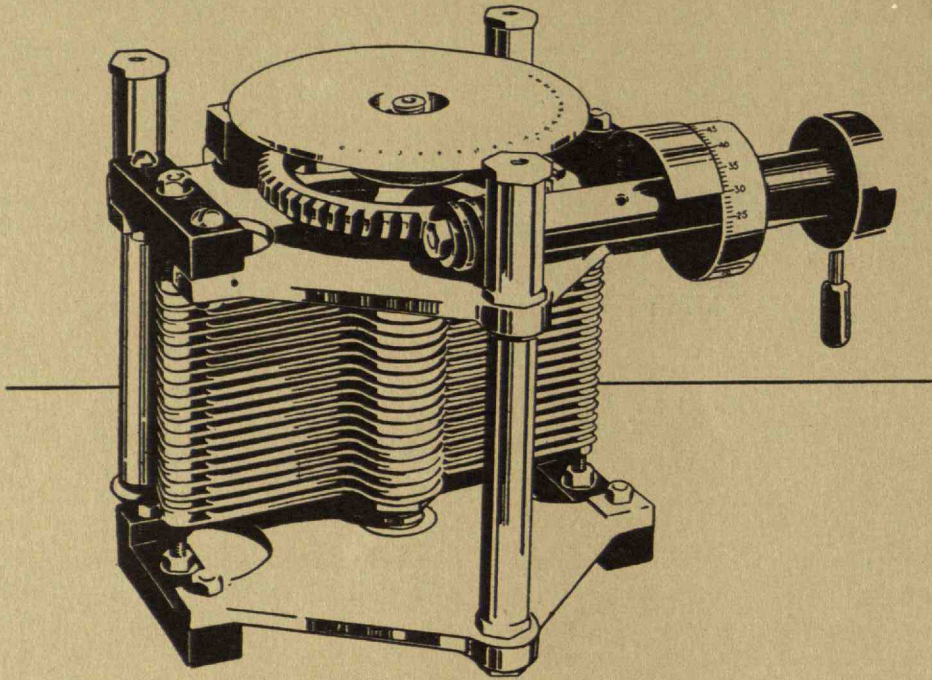
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